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Problems of Economics

ВОПРОСЫ ЭКОНОМИКИ

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General Laws and Special Features of the Construction of Socialism in Various Countries.

The Tula Economic Council and the Problem of Developing Coal Production in the Moscow Basin.

Reserves for Lowering the Cost of Industrial Production.

The Crisis of Contemporary Bourgeois Political Economy.

What Is Behind the Reformists' "Theories" of A Second Industrial Revolution.

Some Questions of the Theory and Practice of Price Formation in the U.S.S.R.

Forty Years of Development of Socialist Economics.

The Application of Electronic Computers to Economic Planning and Statistics.

The Journal of the U.S.S.R. Academy of Sciences, Institute of Economics

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Problems of Economics

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PROBLEMS OF ECONOMICS

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ditorial:

he Soviet Economy in a New Advance

The 40th anniversary of the Great October Revolution was rked by further strengthening of the international position of USSR, of its power and its authority, by great achievements the sphere of scientific-technical progress which clearly nonstrated to the whole world the unquestionable advantages the socialist system. The world's greatest installation for the dy of the atom's nucleus — the 10 billion volt synchrophaso- n — began functioning; the world's first atom-powered ice- aker "Lenin" was launched; serial production of the first ssenger planes with jet propulsion and turboprop engines was stered; an intercontinental ballistic missile, which helped to bit the first artificial earth satellite, was created. These rec- achievements of Soviet sciences in theory as well as in its ineering embodiment characterize the high level of the de- opment in the USSR of a number of scientific and technical ds such as nuclear physics, mechanics, chemistry, quality tallurgy, radio-electronics, automation, computer mathemat- , etc.

ur country is forging ahead much faster than capitalist coun- es. In the last forty years -- from 1918 to 1957 — the average ual tempo of growth of industrial production in the USSR ounted to ten per cent, while in the USA and France — to 3.2 cent and in England — to 1.9 per cent. If we exclude the rs of Civil War, the reconstruction period and the Father- d War, in the 22 peaceful years our industrial production in- ased on the average by 16.2 per cent, while in the USA by 2.8 cent, in England — by 3.2 per cent, and in France by 3 per cent. s, the tempos of industrial production in the USSR are on the rage five to six times as high as in capitalist countries.

n the Soviet Union all the conditions for the further develop- nt of the economy at even higher tempos have been created. his way, a successful solution of the basic economic task of USSR — to catch up to and surpass the main capitalist coun- s in per capita industrial production — becomes a real pos- lity.

During forty years of its existence socialism proved that as ocial system it is far above capitalism." We read this in the laration of the conference of the Communist and Workers' ties' representatives which took place in Moscow in Novem- 1957. "It secures the development of the productive forces empos unheard of and impossible under capitalism. The great cesses of the Soviet Union in the field of economics, science technique, the results achieved by other socialist countries ocialist construction, convincingly prove the great vitality of alism."

he economic results of 1957 confirm with new force that so- ism has basic advantages over capitalism. All 15 Union Re- ics overfulfilled plans in the total volume of industrial pro- ion. The latter increased for the whole USSR by 10 per cent ompared with 7.1 per cent planned. Productivity of labor in whole industry rose in 1957 by 6.5 per cent (planned increase 4 per cent). To the successes of industry and construction, gnificant contribution was made by the reorganization dustrial and construction management, carried out in con- nity with the February (1957) decisions of the plenum of the CPSU and of the Seventh Session of the Supreme Soviet of the R.

econstruction of industrial and construction management al- y shows real positive economic and financial results. A ber of the economic councils took concrete measures for development of specialization and cooperation of plants h will yield a great economic effect. For example, under old forms of management, almost every machine-building t had its own foundry section, most of them of small capacity, with poor technical equipment and with high cost. As a result of the planned measures for increasing the capacity and specialization of the larger foundries and the application of better methods of casting, it is possible as early as in 1958 to abolish at the plants of the Moscow City Economic Region 72 small, poorly mechanized, unprofitable foundries without cutting down the total volume of casting. The economy from lower costs of production of industry under control of the economic councils, obtained over and above the planned one, during the ten months of 1957 amounted to 3.6 billion rubles. Bringing management closer to the construction organizations and construction sites secured — above that in 1956 —fulfillment of the plan of capital works: in 11 months of 1957, the state annual plan for capital investments was fulfilled by 86 per cent, for construction-assembly works — by 91 per cent, while the corresponding figures for the same period of 1956 were 82 and 84 per cent.

The development of agricultural production in 1957 proceeded towards the successful realization of the task of a further great upsurge of agriculture and cattlebreeding, set by the 20th Congress of the Party. In an unusually short period 36 million ha. of the virgin and long-fallow land were put into cultivation and this resulted in new successes in grain production. On this basis the situation in a branch of agriculture which was lagging behind — cattlebreeding — was radically improved. The number of cattle on state farms and collective farms increased in 1957 by 4.7 million; the plan of deliveries and purchases of livestock was completed one month earlier than planned and during the whole year there were acquired 550,000 tons more cattle and 3.2 million tons more milk than in 1956.

The care for the welfare and happiness of the people is the highest law of the whole activity of our Party. Translating into life the historical decisions of the 20th Congress of the CPSU, backed by the great successes in the development of heavy industry and of the whole economy, the Communist Party and the Soviet Government in 1957 carried out a number of the most important measures directed at improving the material welfare and cultural level of the people. Beginning with January 1st, 1957, the wages of low-paid workers and employees were increased and the minimum wages exempted from taxation were raised. According to the new state pension law, pensions of the workers, employees, and other categories of labor were substantially increased. For the workers employed underground in the mines of the Donbass and Lvov-Volhynia coal basins, as well as for workers and other personnel of a number of mining, metallurgical and coke-chemical plants of the ferrous metal industry, the working day was reduced. The growth of industrial and agricultural production permitted a substantial increase in production of commodities for mass consumption. On this basis, in 1957, the turnover of state and cooperative trade was considerably expanded, and sales of agricultural products on the collective farms' markets were increased. The volume of retail trade in 1957 increased by more than by 75 billion rubles, which is a striking indicator of the growth of people's welfare.

Outstanding successes of the socialist economy, which has entered the fifth decade of its existence, produce greater and greater influence on the whole development of world history. We read in the Declaration: "The experience of the USSR and other socialist countries fully confirms the correctness of the Marxist-Leninist thesis that the processes of the socialist revolution and socialist construction are based on a number of principal laws acting in all countries which enter the road of socialism." Unheard-of achievements of our country in economic and cultural construction show that the socialist system and the Soviet social order open indeed unlimited possibilities for the development of the productive forces, secure uninterrupted improvement of living conditions for all workers, for the whole people. During the years of the Soviet power the real wages of the workers in industry and construction have increased almost five times and real incomes of peasants have increased more than six times.

***

The plenum of the CC of the CPSU and the ninth session of the Supreme Soviet of the USSR, which took place in December, 1957, made important decisions concerning questions of economic and cultural construction in our country. The carrying out of these decisions would secure a further growth of the economy, a rise in the level of welfare and culture, and the growth of the creative initiative and activity of the broadest masses of workers.

The plenum of the CC of the CPSU discussed two questions: the results of the Communist and Workers' Parties' conferences and the work of labor unions of the USSR. The plenum fully approved the historical documents adopted by the conferences — the Declaration and the Manifesto of Peace, which represent a great contribution to the creative development of Marxism-Leninism on the basis of the collective experience of the Communist Parties and which give a telling blow to the provocative plans of world reaction. These most important documents are permeated with consciousness of the high responsibility of the Communist and Workers' Parties for the fate of the world socialist system, for the fate of the general peace and the future of the whole of mankind.

"The Communists of the Soviet Union, the whole Soviet people" — it is emphasized in the decisions of the plenum of the CC of the CPSU — "see their international duty in respect to the international labor movement and the workers of all countries consisting in the successful construction of communist society, in strengthening the might of our country and of the whole socialist camp, in the constant struggle for peace among the peoples, in cementing the ties of friendship and proletarian solidarity with working people and with democratic forces in the whole world."

For the cause of communist construction in our country, of extremely great importance is the decision of the December plenum concerning the activities of labor unions in the USSR. This decision helps the labor unions to increase their role in the people's struggle for building communism, to intensify their activity of drawing workers into production management.

The tasks which the December plenum of the CC, CPSU, set before the labor unions of the USSR are dictated by life, by the practice of economic and cultural construction in our country. In recent years the Party carried out a number of important measures directed toward further growth of the creative initiative and activity of the working people, toward further drawing of them into the management of state affairs. At the present stage of communist construction a pressing task is the further strengthening of labor unions' participation in the management of the economy. Lenin wrote: "Being the school of communism in general, the labor unions must be in particular schools of management of socialist industry (and then, gradually, of agriculture) for the whole mass of workers." ("Works," volume 33, pp. 164-5.) The labor unions, through which the working class realizes its control over the activities of the production managers, managing on the basis of the principle of individual responsibility, are to play even a greater part in drawing the workers into participation in the management of socialist production. The plenum of the CC, CPSU, pointed out the necessity to develop and perfect, by all means, such forms of drawing working people into production management as socialist competition, production conferences, and collective contracts with enterprises.

Constantly improving the practice of guiding socialist competition, the labor unions are advised to direct the energy and initiative of the workers and specialists towards the solution of the main, the most important questions of perfecting production. Now socialist competition is characterized by persistent struggle for technical progress, for full mobilization of production reserves, for economy and frugality, and for earlier fulfillment of the economic plans. Lenin saw the guarantee of the successful carrying out and overfulfilling of our plans in the creative activity and heroic labor of the masses. "Following the experience in science and practice," said he, "we should try at the factories constantly to fulfill plans before the fixed time... This depends upon us. Let us improve the economy in every shop, in every depot, in every branch and then we shall fulfill the plan in short
time." ("Works," volume 31, p. 479.)

The plenum of the CC of the CPSU considered it necessary
that the All-Union Central Committee of Trade Unions, the ce
tral committees and republican councils of the labor unions,
should participate more actively in discussing questions of pr
duction, labor and labor conditions when these questions are c
cussed by the Soviet and economic organs. The labor unions a
advised to use fully the rights they have for carrying out state
control over compliance with labor legislation and social con-
trol over protection of labor, persistently improve the organi
tion of social insurance, strengthen control over fulfillment of
plans for housing construction and distribution of floor area,
over the activities of the trade network, public restaurants, an
of the organs of social welfare. In connection with this the ro
and the rights of the factory committees are greatly increase

The plenum of the CC of the CPSU emphasized that the deci
sive condition for the successful solution of these problems b
labor unions lies in improving Party guidance. Without per-
mitting commandism and interference with details, the Party
organizations should skillfully direct the activities of labor
unions and constantly help them. It should support their initia
tive in every way while at the same time securing the active
ticipation in this work of Communists, through whom the Part
brings its influence to bear on the activities of labor unions.
Carrying out the decisions of the December Plenum of the CC
the CPSU, the Soviet labor unions, which became for millions
workers in our country a real school of management, of eco-
nomic control — a school of communism — are now called to
take part even more actively in the solution of the general pro
lems facing the country, to increase their role in the great
process of construction of communist society.

***

One of the most important historical achievements of Octob
is the creation in our country of a socialist planned economy.
State planning, which penetrates our socialist system from to
to bottom, creates conditions for quick and proportional deve
ment of all productive forces of the country. The state plan c
development of the USSR's economy for 1958, approved by the
Supreme Soviet of the USSR, which, in its contents, tasks and
methods in many respects is different from the previous annu
plans, is an important landmark of socialist planning.

The tasks set in this economic plan and in the state budget
1958 are derived from the historical decisions of the 20th Con
gress of the CPSU and other decisions of the Party and the go
ernment taken after that. The new plan has been prepared at
time when important measures for the strengthening and de-
velopment of the Leninist principle of democratic centralism
production management are being carried out. Prepared for
new system of management, it is a complex plan of developm
of the whole economy by branches and republics; it foresees
better use of the natural and productive resources of each re
public and improvement of interregional economic ties. The
basic direction of the plan for 1958 is determined by the aim
of economic development in the long-range plan. The plan for
1958 foresees further progress in industry, transportation, a
culture, in the growth of the material welfare and cultural lev
of the Soviet people, the strengthening of the defensive capabi
of the Soviet state, and the broadening of economic collaborat
with brotherly socialistic countries.

An important feature of the plan for 1958 is in the fact that
its preparation at the center was preceded by great work don
at the plants, construction sites, MTS, state and collective fa
This permitted, better than in the previous plans, taking into
sideration inner reserves and resources of enterprises, econ
regions, and republics, as well as the latest production exper
ence and suggestions from below.

It must be pointed out that, parallel with the preparation of
plan for 1958, there also was prepared an outline for the deve
opment of the leading branches for the next year which will h
in preparing the perspective seven-year plan of economic de-
velopment. In this way the premises are created for a better
foundation on which to base the following annual plans, for fu
ther perfection of economic proportionality. We know that in
perspective plan for 1959-1965, on the basis of the growth of
heavy industry, an acceleration of the development tempos is

oreseen of those industries, the products of which satisfy the demand of the population for mass consumption goods, especial-y in clothing and footwear. In the seven-year plan, an acceler-ated development is foreseen for such branches of the chemical ndustry as plastics, artificial fibers and leather, as well as oil and natural gas. High tempos of development are also expected n ferrous and non-ferrous metallurgy and the electrification of he economy.

In correspondence with this, special emphasis is made in the plan for 1958 on the development of the chemical industry, and irst of all, of the organic synthesis branches — production of plastic masses and synthetic materials. The development of the chemical processes in the economy is one of the most important roads to technical progress; it helps to increase the productivity of social labor in a most decisive way. For example, casting in-o wrapping molds made of synthetic resins will lower the ex-penditure of metal and mold materials, lower the expenditure of abor, increase the quality of the product and make much easier he subsequent mechanical processing of details. Application of plastic masses lowers the weight of products, and the expendi-ure of labor and metals. For example, in the preparation of ables, one ton of polyvinyl chloride masticated rubber permits aving up to five tons of lead. On the basis of synthetic resins igh quality fabrics and knitted wear can be produced, saving atural raw materials. Expansion of production of a number of chemical products is closely connected with the development of ew technique — atomic, reactive, radio-electronics, etc.

The 1958 plan foresees a rapid development of oil and especial-y of natural gas production. For this purpose the volume of apital investments in these branches is increased by thirty per ent over the level of 1957. The growth of oil production will in-rease by 14 per cent and of natural gas by 58 per cent (which s substantially higher than the tempo of coal industry develop-ment); this will help to improve the structure of the fuel balance f the country and at the same time will secure necessary raw materials for the rapidly growing branches of the chemical in-ustry.

In the economic competition between socialism and capitalism, he victory will go to that system which will be ahead in world cientific-technical progress. V. I. Lenin pointed out that "Vic-orious will be the one who has the best technique, organization, iscipline, and machines" ("Works," volume 27, p. 167). The uestion of technical progress always stood in the center of the arty and government's attention. The main lines of the 1958 lan are subordinated to the task of accelerating the tempos of echnical progress of the USSR's economy. For example, the an foresees production of the most progressive groups of ma-hines and equipment, including the most progressive groups of achine tools for the technical reconversion of machine building self. The part of such machine tools in the production of all achine tools will increase in 1958 by 41 per cent, and this will onsiderably improve the technical structure of metal-cutting quipment in our plants. At the same time it will be necessary produce 147 automatic and semi-automatic conveyers for ma-hine building and metalworking. In order to apply more widely e processing of metals by pressure and to increase the pro-ctivity of labor in this field, 63 highly productive, powerful rging and stamping presses will be produced and the world's ost powerful hydraulic stamping press will be constructed.

In 1958 the volume of non-returning financing of technical ogress will be considerably increased. At the same time the oblem will arise of increasing the part of credit applied for e introduction of new techniques in the total amount of appro-iations for this purpose, and this will increase the responsi-lity of the plants for the results of their economic activities. or acceleration of technical progress, of great importance is at part of the plants' funds which is spent on the introduction new technique and modernization of existing plants. In this nnection, the role of "control by the ruble" will gain in im-rtance in increasing the part of the profits which remain at e disposal of the plants.

The accelerated development of machine building, foreseen in e 1958 plan, will secure further technical reconversion of a mber of branches of the economy, including transport. In 1958 ere will be delivered to the railroads 346 electric locomotives d 375 two-section diesel locomotives; 1, 684 km. of electrified railroads will be ready for exploitation. As a result of this, the part of the electric and diesel locomotives in the total freight turnover of railroads will reach 26.5 per cent as compared with 20 per cent in 1957. With the introduction of these types of locomotives the cost of hauling will be lowered by 20-25 per cent. At the same time it is planned to increase the part of water, truck, pipe-line, and air transport in the total movement of freight.

In its development machine building depends first of all on ferrous and non-ferrous metallurgy. In 1958 a further development of ferrous metallurgy is foreseen, capital investments in it reaching 12.1 billion rubles. Capital investments in iron ore mining will be increased by 73.4 per cent and the construction of metallurgical plants by more than 40 per cent. As the production of iron and steel is held up by insufficient tempos of development of the raw materials base, in 1958-59 the increase in the capacity of iron ore production will reach almost 35 million tons. Production of pig iron in 1958 will reach 39.1 million metric tons, of steel — 53.6 million tons, and of rolled steel — 41.7 million tons.

An important condition for the successful carrying out of the economic plans is continuous growth of labor productivity and lowering costs of production. In 1958 an average increase in productivity of labor in industry is planned at 5.4 per cent and in construction — at 8.5 per cent. The cost of commodities (comparable goods) will be lowered by 2.5 per cent and the planned cost of construction-assembly work by 4.6 per cent. Lowering the cost of production and increasing accumulations in the economy assume a more rapid growth of productivity of labor as compared with the rise of wages.

The state budget of the USSR for 1958 must insure financing of all measures foreseen by the new economic plan. Our budget is a budget of peace and creation. For the development of all branches of industry 129 billion rubles is appropriated. The total amount of financing for capital investments (including the circulating capital in construction and some other expenditures) will reach 203.8 billion rubles. In connection with the growth of the volume of capital works, especially important are questions of ending the dispersion of capital investments in numerous projects, lowering the period of construction and its costs, and cutting down the volume of uncompleted construction. The economic councils are facing this problem: they have to concentrate resources on the most important plants under construction and those which may be ready for operation, and to limit the number of new projects.

The decisive condition for cutting down the cost of production and circulation, the condition for increasing accumulation, is the constant application of the regime of economy, the frugal use of raw materials, semi-finished materials, fuel and money, the maximal cutting down of losses in production, a struggle with excesses and extravagance. The total economy from lowering costs of production and circulation in 1958 should reach about 36 billion rubles. At the same time the role of the financial system in mobilization of the accumulations and in control over their proper and most effective use will be strengthened. Under the new conditions of industrial and construction management of special importance is improvement of the ties inside the region as well as interregional ties. This is one of the most important factors for the economy of state means.

In the planned socialist economy the unity of the regulation of wages, prices of agricultural raw materials and retail prices should be secured, in view of the necessity for preserving the proper proportions in the distribution of the national income as well as preservation of the proper ratios in the balance of money income and expenditures of the population. The task of the budget is to secure a rational distribution of socialist accumulations, taking into consideration all-Union interests, and first of all, distribution of these accumulations among the most important branches of the economy.

About three-quarters of the total amount coming from industrial profits into the state budget flows from the plants now under control of the economic councils. Further strengthening of the finances of the economic councils is directly connected with the increase of the level of economic activity of the plants and construction sites. One of the basic questions here is bringing order into the material-technical system of supplies. The economic councils have broad rights in distribution and redistribution of the raw materials, semi-finished materials and fuel, as well as in selling surplus and unused material values. An important part in the improvement of the economic-financial activity of the plants is played by the proper use of the circulating capital which is entrusted to them. Its total volume in the whole economy (excluding cooperatives) in 1958 will exceed 250 billion rubles. In order to improve the material-technical supplies of the plants and construction sites, accelerate the velocity of the circulating means, establish closer ties with the suppliers of raw and other materials as well as with consumers of products, it is necessary more boldly to apply the principle of material interestedness. It is also time to introduce the same system of material encouragement for fulfillment and overfulfillment of the targets in the field of material-technical supply.

In lowering the costs of production and increasing the state revenue, of tremendous importance is the development of specialization and plant cooperation. It is important to underline here that many measures for increasing specialization in industry can be realized without substantial capital expenditures. A great economic effect is received from discontinuing production of goods by plants which are not suitable for their assortment, concentrating production on certain types in specialized plants. Development of specialization and cooperation sets the task of maximal strengthening of economic ties, especially interregional ties. Carrying out orders for other economic regions must be under constant control of the economic councils because untimely carrying out of these orders brings serious losses to the planned economy. The importance of securing priority execution of orders (and the high quality of work at that) from other economic regions demands an increase in the responsibility of the economic organizations for the strict observance of obligations undertaken in interregional supply, the strengthening of "control by the ruble" over the economic and financial activity of the plants.

A successful execution of the planned targets presupposes a full use of the available resources of the economy. For example, on October 1st, 1957, there was on construction sites uninstalled equipment of the total value of 13.4 billion rubles. This was brought about by excessive and premature ordering as well as by delays in starting exploitation of the construction objects. Sharp lowering of the value of such equipment, which is possible without substantial capital investments, is a large reserve of our economy, the use of which will have a great economic effect.

Our country is confidently advancing along the road towards a great upsurge in agriculture. The plan for 1958 foresees a further opening of virgin and fallow lands. As the surveys show, in the southeastern regions of the RSFSR, in the Urals and Siberia, in the next two to three years it may be possible to open for cultivation 12-15 million ha. of new lands. At average yields of 50-60 poods per ha. this will bring 600-900 million poods of grain. Thus the Urals and Siberia will be able to bring production of marketable grain up to two billion poods.

As a result of the development in our country of the general patriotic movement for a sharp increase of livestock products, so that in the next years we may catch up with the USA in per capita production of meat, milk and butter, some republics already plan in 1958 to increase their meat production by more than 30 per cent. For the country as a whole production of meat (slaughtered weight) should increase by 14 per cent and production of milk by almost 12 per cent. In 1956 the industry of the USA produced 639,000 tons of butter. In 1958 it will be possible to bring production of butter in the USSR to 700,000 tons, which will give our country the first place in the world in production of butter. Under these conditions the meat and butter industries have the responsible task of preparing their plants for the processing of increasing masses of livestock products. The available production capacities of the meat industry already are not sufficient for the timely processing of its raw materials into goods of high quality. That is why it is so important to carry ou extensive measures for the expansion of the material-technical basis of the meat and milk industries and first of all of refrigeration for production and storage of meat and milk products.

In connection with the speeded-up growth of the chemical industry, in the near future the supply of our agriculture with mineral fertilizers and poisonous chemical products will be sharply increased. This supply includes such highly effective means as phosphoric organic compounds and weed killers. A wide application of these means would make it possible, with relatively small expenses, fully to mechanize a highly labor-consuming process in agriculture — the struggle with weeds and harmful insects — and to obtain a substantial economy of labor resources.

On the basis of the development of heavy and light industry, as well as agriculture, a considerable increase of production of food products and goods of mass consumption took place in our country. "Economics, science and technique in the Soviet Union reached such a level of production," said N. S. Khrushchev at th jubilee session of the Supreme Soviet of the USSR, "that we now have the possibility, without harming the interests of strengthening the defense of our country and the development of the heavy industry, to develop light industry more rapidly, and in particular to produce such amounts of fabrics and footwear for the population that in the next five to seven years it will be possible to satisfy fully the growing demand of the population for such products." In 1958 production of fabrics of all kinds will increase by 75 million meters, of which 43.9 meters will be silk fabrics. Production of leather goods will increase by 28 million pairs and will reach 342,200,000 pairs. Production of children's clothing and footwear will increase especially sharply. With the growth of purchasing power of the population the volume of retail trade turnover will increase by 45 billion rubles, reaching 660 billion rubles; its structure will also be improved, which is an indicator of the growth of the material welfare of the population.

Of great importance for the improvement of the material welfare and cultural level of the population is the expansion of housing construction. In 1958 the volume of capital investment in housing construction will be equal to one-third of the total volume of capital investments in construction-assembly work in the whole economy. In addition to that, large means are appropriated for this purpose from the resources of individual plants and economic organizations.

Great and responsible are the tasks standing before the Sovie people in 1958. Successfully developing its economy and culture the USSR is carrying out a policy of peace, a policy which is derived from the nature of the most peaceful, most humane social organization — socialism.

The Soviet people unanimously approved decisions of the December plenum of the CC of the CPSU, and of the Ninth Session of the Supreme Soviet of the USSR, seeing in them a new manifestation of care for the welfare and further prosperity of our great motherland. A successful fulfillment of the state plan of economic development in 1958 will secure further advances of the USSR on the road to the solution of the main economic task. The Soviet people, inspired and guided by their Communist Party, will obtain in 1958 new great successes in the construction of socialism, in advancing the noble cause of strengthening peace throughout the entire world.

L. Gatovsky:

General Laws and Special Features of the Construction of Socialism in Various Countries

The problem of the general laws and special features of the construction of socialism in various countries is of great importance both scientifically and politically. In the historical Declaration of the conference of representatives of the Communist and Workers' Parties of the socialist countries, which took place in November, 1957, it received special attention.

The experience of the Soviet Union and all other socialist countries confirms the correctness of the Marxist-Leninist thesis that the construction of socialism is based on a number of principal, general laws which are necessarily observed in each country building a socialist society. These laws are objectively necessary because they are conditioned by the whole process of historical development. Whatever the peculiarities of this or that country, the principles of socialist construction have to take into consideration the nature of the capitalist method of production and the character of the opposing socialist method of production which is being created. The nature of capitalism as well as the nature of socialism do not depend upon the peculiarities of individual countries.

The general, principal laws of socialist construction are determined by the presence in each country during its transition to socialism of the same economic systems [uklady] and classes. Marxist-Leninist analysis of the growing contradictions of capitalism, of the nature of systems and classes which exist in the transitional period, made it possible to discover and to apply properly the laws of socialist construction. V. I. Lenin emphasized that in every country which enters the period of transition from capitalism to socialism, aside from its special features, there are three basic forms of social economy: socialist, small commodity producers' and capitalist. These correspond to three basic forces, three social classes: the working class, the peasantry, and the bourgeoisie. The nature of each given economic system, of each given class, is common to all countries building socialism. These main international characteristics are peculiar to each class whatever its importance in the country which enters the road of socialist construction, whatever the economy and cultural level of its development or existing political situation. For all countries, the general, basic economic conditions of existence of a given class determine the character of its class interests, its politics. Consequently, the policy of the working class, its relation to other classes — on the one side to the peasantry, to all laboring people; on the other to the bourgeoisie — in the main and fundamentally is common for all countries travelling the road to socialism.

In the Declaration of the conference of the representatives from the Communist and Workers' Parties of the socialist countries it is pointed out that the main laws of the socialist transformation of society are: guidance of the working masses by the working class, the nucleus of which is the Marxist-Leninist party; carrying out of the proletarian revolution in this or that form and establishment of the dictatorship of the proletariat in this or that form; an alliance of the working class with the main mass of peasantry and other groups of toilers; liquidation of capitalist property and establishment of social property in the basic means of production; gradual socialist transformation of agriculture; planned development of the economy, directed toward construction of socialism and communism and improving standards of living of the toilers; realization of the socialist revolution in the field of ideology and culture and creation of a numerous intelligentsia, loyal to the working class, to the laboring people, to the cause of socialism; liquidation of national oppression and establishment of equality and brotherly friendship between peoples; defense of socialist achievements from the attempts of foreign and domestic enemies; solidarity of the working class of a given country with the working class of other countries — proletarian internationalism.

The Marxist-Leninist theses concerning general laws of socialist construction represent an ideological basis of policy of the Communist and Workers' Parties in the countries of the socialist camp; they are vitally important elements of the unity of that camp. It is not accidental that exactly these laws are subjected to the most ferocious attacks on the part of the imperialist politicians and ideologists, on the part of the various representatives of reformism. Ignoring or underestimating the role of the general laws of socialist construction is a manifestation of revisionism which is the main peril for the Communist and Workers' Parties at the present stage. It leads to sliding down to positions of "national communism," "liberal communism," to the undermining of the unity of the socialist camp, to the isolation of the socialist countries from each other.

At the same time Marxism-Leninism considers that these general laws function everywhere in the presence of a variety of the historically arrived-at national peculiarities and traditions, specific economic, political and cultural conditions, growing out of the domestic and international conditions of each country. The 20th Congress of the CPSU emphasized the inevitability of the various concrete forms of transition to socialism in various countries while the main principles of socialist construction remain common to all of them. The success in realization of these laws depends upon the skill in their application based on an understanding of the situation, that is, carefully considering concrete conditions. In view of this the interests of socialist construction demand not a dogmatic repetition of general formulae and principles of transition to socialism, but careful scrutiny of that economic and political situation which actually is arising in a given country at a given stage of its development. From this one may see the tremendous importance of a struggle against dogmatism, for the creative application of the general principles of socialist construction in correspondence with the peculiarities of each country excludes mechanical copying of the concrete forms of economic policy, carried out in other countries.

Ignoring national peculiarities inevitably leads to a divorce from life, from the masses, and harms the cause of socialist construction. At the same time to exaggerate national peculiarities and abandon the general principles of socialist construction under the pretext of such peculiarities would constitute a grave danger. In his report to the Jubilee Session of the Supreme Soviet on November 6, 1957, Comrade N. S. Khrushchev spoke in this way: "The opponents of socialism dream that the Communists would start searching for some completely 'new,' artifical roads to socialism in each country separately, while the great experience of socialist construction, available in the Soviet Union, China, and other countries, would be forgotten... But these calculations prove wrong."

The Great October Revolution opened the highroad to socialism, realizing for the first time in history the Marxist-Leninist principles of socialist construction. As emphasized in the newspaper "Jenmin Jihpao" in an article, "Once More About the Historical Experience of the Dictatorship of the Proletariat," published in 1956: "The road of the October Revolution reflects the general law of the revolution and construction, at a certain stage, of the great road in the development of human society. This is not only a highroad for the proletariat of the Soviet Union, it is also a highroad along which the proletarians of all countries will advance to victory." This is confirmed by the experience of all countries of the socialist camp, equally by the more advanced technically-economically (for example, Czechoslovakia) and those that were more backward. At the same time the concrete progress of socialist construction and the class struggle in the USSR reflects the peculiarities, determined by those specific economic and political conditions, which were present in our country during its transitional period from capitalism to socialism.

Among these peculiarities is the fact that prerevolutionary Russia did not reach a high degree of capitalistic development, that she had substantial survivals of serfdom, that technically-economically she was far behind the advanced capitalist countries and was an agrarian country. This could not fail to determine a number of specific features of socialist construction in the USSR. Lenin pointed out: "The more backward is the country which had — because of the zigzag movement of history — to start a socialist revolution, the more difficult for her is the transition from the old capitalist relationships to socialist ones" ("Works," volume 27, p. 67). The Soviet Union had to traverse the difficult road of building modern industry in the shortest historical time. This was inevitably connected with great difficulties, with sacrifices and privations for the working people. Such difficulties and sacrifices, of course, would not have been necessary if Russia had entered the road of the revolution as a highly developed country industrially.

A very important feature of the transitional period from capitalism to socialism in our country was the fact that socialist construction and the liquidation of technical-economic backwardness in our country were carried out under conditions when the Soviet Union was the only country building socialism. The USSR not only did not receive help from any state, but had to repel attacks by numerous imperialist states. It had to go through exceptionally burdensome foreign interventions, a bloody civil war and, straining all its forces, to be in a state of military preparedness under conditions of constant direct threats of a renewal of intervention. Thus, when complete collectivization was in full swing in 1929-1930, as well as during other periods, the threat of intervention was literally hanging over our country. All this increased to a great degree the resistance of the exploiting classes to socialist construction, brought about an extraordinary sharpening of the class struggle inside the country and necessarily was reflected in the forms, methods and tempos of economic construction.

The Soviet Union was the first country in the world to carry out the construction of socialist society. Because of that it could not borrow from historical experience in socialist construction, if we disregard the short-lived establishment of the dictatorship of the proletariat by the Paris Commune.

After the victory of socialism in the USSR, the rout of fascism as a result of the Second World War, and the formation of the world socialist camp, there emerged new, more favorable conditions for the construction of socialism in each of the countries of people's democracy. They enjoy the possibility of building socialism free from the threat of intervention and civil war; they do not need to pass through the policy of "war communism" nor through the retreat connected with it (which had a place in the USSR at the beginning of the New Economic Policy), nor through such a long period of reconstruction of the economy. At an earlier stage of socialist development than in the USSR, these countries were able to unfold their industrialization. Each of the countries of people's democracy is relying on the help and experience of the Soviet Union and of the whole camp of socialism, on the comprehensive brotherly political, economic, and scientific-technical collaboration between socialist countries.

As Russia was the only country where the proletarian dictatorship was established, it was necessary to have at least an average level of capitalist development for the victory of the socialist revolution. But under the new conditions, when socialism became victorious in the USSR and when a world socialist system of economy was formed, the tasks of the socialist revolution can be successfully solved with the help of the advanced socialist countries even in countries with a weak development of capitalism. Now the possibilities of socialist construction have greatly expanded, spreading even to very backward as well as small countries. V. I. Lenin placed a scientific foundation under the possibility, in certain historical conditions, of a non-capitalist road of development for countries, backward in the social-economic respect, countries which have not yet passed through the stage of capitalism. This was confirmed by historical experience. A number of such countries, being freed from the yoke of imperialism, as they solved their anti-imperialist, anti-feudal problems, entered the road of socialist construction, by-passing the capitalist stage.

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The opponents of Marxism-Leninism, various representatives of revisionism, try to exaggerate artificially the peculiarities of the transitional period in this or that country of people's democracy. They try in every way to present these national peculiarities in such a way, as if they were incompatible with the general Marxist-Leninist principles of socialist construction, and were radically different from the basic characteristics of socialist construction in the USSR. The opponents of Marxism-Leninism especially try to present in this spirit the peculia concrete forms of socialist construction in China, the peaceful transition there to socialism. They even try to present the Marxist-Leninist thesis concerning the peaceful parliamentary road of the working class to power and the peaceful realization of socialist construction as if this were a shift to the position of reformism.

However, all these attempts to distort reality are hopeless. Whatever the forms of socialist construction applied by the Marxist-Leninist parties — peaceful or non-peaceful — they represent a unity of principle: a socialist revolution carried out by the dictatorship of the proletariat. This unity in various countries building socialism — whether it is the USSR in its transitional period or present-day China, Czechoslovakia, Poland, etc. — is manifested in the fact that the dictatorship of the proletariat everywhere has as its purpose the revolutionary substitution of private property by collective socialist property, the liquidation of capitalist economic forms and exploiting classes. The liquidation of the latter as one of the necessary tasks of the transition to socialism in its nature is common to, is the same task for, all countries, in spite of differences and peculiarities in the forms of its realization. All this comes from the very nature of the socialist economy, which cannot emerge in the womb of the capitalist formation, cannot spontaneously grow out of the regime of private property — neither out of the small producers' economy, nor out of the capitalist economy. Hence the necessity of the special transitional period from capitalism to socialism, the period of socialist revolution and dictatorship of the proletariat. The appearance of socialist methods of production inevitably is a revolutionary and planned process unthinkable without liquidation of the capitalists' dominance and establishment of power by the working class. This is a law for every country advancing on the road to socialism.

So far as a socialist regime of the economy cannot be born in the womb of the capitalist formation, it should be preceded by a revolutionary change of the political superstructure. This characterizes the mutual relationship of the basis and superstructure under conditions of socialist revolution. The proleta state which emerges as a result of objective economic necessit is itself a tool of the planned construction of a new basis accor ing to the principle of socialist collectivization of production. This role of the political superstructure, unheard of in history, is determined by the very nature of the socialist economy for th period of transition to socialism. The increase and strengthening of the economic role of the dictatorship of the proletariat on the basis of greater and greater development of the socialist collectivization of production is a law. Such a socialization represents a basic economic process during the transitional period from capitalism to socialism.

What is then common between this and the thesis of the refor ists who consider the present bourgeois regime as "almost socialist" or, in the worst case, as some "mixed economy" in whi elements of socialism gradually become dominant, and it remai only — step by step — to perfect the economy and the state pow bringing each year certain corrections and removing "imperfec tions of the mechanism"? The contemporary bourgeois state is declared to be above classes, a people's state, a "state of gene prosperity" (the expression of Labor Party member Cole), "the social welfare state" (according to the terminology of the Austr right socialists), etc. The thesis of the "peaceful transformation of capitalism into socialism" takes the place of the basic Marxist thesis of the socialist revolution and dictatorship of the proletariat, of the special, revolutionary period of transition from capitalism to socialism. However, for many, many reformist leaders statements became customary that Marxism is a stage that was passed long ago.

It must be noted that a position denying the necessity of such a transitional period found a certain place on the pages of a Polish weekly, "Zycie gospodarcze." For example, E. Kleer in his article, "Discussion Concerning the Correct Understanding of Socialism" (No. 33, 1957), asserts: "Under conditions of contemporary capitalism collectivization of the means of production in the economy of the state begins. It does not have all the elements of socialist collectivization; nevertheless there are so many of these elements that one may see that in the womb of capitalism a socialist regime is being formed — the basis of the future peaceful transition from capitalism to socialism. The statements quoted above serve as a basis for the statement that, for the economically developed countries, the transitional period, as an historical phase lying between capitalism and socialism, is not inevitable." As the reader may see, this position is not new. Unfortunately it has much in common with the views of the reformists mentioned above. In this article E. Kleer disagrees with the thesis concerning the impossibility of the emergence of a socialist regime under capitalism. He considers that state monopoly capitalism means the appearance of a state formation which "is and is not capitalist" and the state under it "partially is transformed from being a representative of the class of capitalists into the spokesman for the whole society." In his opinion this "without doubt leads to the blunting of class contradictions." "In a certain sense planning is being realized in the capitalist economy," etc. The author attempts to justify his conception by quotations from the statements of the 20th Congress of the CPSU concerning the possibility of a peaceful transition to socialism. However, as we see, in fact E. Kleer takes the road which leads to a substitution of the Marxist-Leninist thesis concerning peaceful forms of the socialist revolution with the reformist thesis concerning the "peaceful growth of capitalism into socialism."

E. Kleer in all ways repeats in his article that "one may speak of the transitional period only in respect to the backward countries." And, in his opinion, the task of the transitional period from capitalism to socialism consists of the "transformation of the economic structure in a country with the predominance of agriculture and household industry into a structure with the dominating role played by industrial production and production with the help of machines." Such a transformation of the production basis — affirms the author — can be in the main realized by capitalism itself, and in many countries it did just that. According to E. Kleer the tasks of the transitional period, standing before the backward countries, have already been realized in the developed capitalist countries and because of that they do not need a transitional period. As we may see from his article, it follows that the process of socialist transformation already has taken place in the developed capitalist countries in respect to the economic basis (creation of the state regime containing elements of socialism) as well as in respect to the political superstructure (the state is being transformed partially into the "spokesman for the whole society," the class contradictions are blunted, etc.).

One cannot fail to notice here the radical deviation of E. Kleer's position from the Marxist-Leninist thesis concerning the inevitability of a special transitional period and the dictatorship of the proletariat. This thesis is applied to any country — to the more advanced and to the more backward technically-economically — and to every form of transition to socialism. Peaceful and non-peaceful transition to socialism equally represent the deepest revolutionary transformation of the basis and superstructure. This transformation cannot be carried out under capitalism either in backward, agrarian countries, or in developed, industrial countries. Of course, the high level of the productive forces in the developed capitalist countries makes socialist construction much easier after the victory of the revolution: the solution of problems in the sphere of creating the material-technical basis of socialism, in the sphere of popular consumption, culture, etc. Yet the question here is not this; the question here is about the revolution in the sphere of private property, production relationships, in the sphere of the state. A revolution cannot be substituted either by the process of development of the productive forces by themselves, or by any corrections introduced into the capitalist economic and political structure.

That is why the peaceful, parliamentary road of the working class to power is not just a change of signboards, as some people present it, but a revolutionary creation of a state of a new type without which it is impossible to solve the tasks of the greatest revolutionary transformation of society in the history of mankind. This transformation is inseparable from the process of the stubborn class struggle between capitalism and socialism according to Lenin's formula "who will finish whom." Consequently the peaceful, parliamentary road of the working class to power, the peaceful transition to socialism does not exclude, but, on the contrary, presupposes the realization of the Marxist thesis, developed by Lenin in his "The State and Revolution" and other works, that the working class cannot just use the old state machine, but must break it up and replace it with a new one. This does not mean, of course, that the old state organizations, their apparatus, cannot and should not be used. But here the class, social essence of the state, its functions are radically changed. It is in this sense that Lenin speaks of the breaking up of the old state machine. The conquest by the working class of the working majority in parliament should be connected with all these revolutionary processes of change in the state type. The transformation of a parliament from an organ of bourgeois democracy into a tool actually representing the people's will presupposes combining around the working class the toiling masses and the patriotic forces. A decisive rebuff must be given to the opportunistic elements which are incapable of giving up their policy of compromise with capitalists and landlords. Such a parliamentary transformation also presupposes defeat of the reactionary anti-people's forces insofar as the dominant classes do not yield power voluntarily.

Whatever are the peculiarities in the forms of the political superstructure in various countries building socialism, all these forms have the same essence. This is a dictatorship of the proletariat accompanied by an alliance of the working class with the peasantry and other strata of toilers. At the same time the guiding of political life in each of these countries belongs to the Marxist-Leninist party. Such is the basis of the socialist revolution in the sphere of the political superstructure. Developed by V. I. Lenin, the Soviet form of the dictatorship of the proletariat is a result of the concrete conditions of the class struggle in our country, of the revolutionary creativeness of the working masses of Russia. Other conditions, shaped in the European and Asian countries which entered the road of socialist construction, brought to life a people's democratic form of dictatorship of the proletariat. Here a very important part was played by the peculiarities of the class relationships reflecting the development of the national front of struggle with fascism, a change in the international situation connected with the victory of socialism in the USSR, the rout of fascism in the Second World War. People's democratic power, in its turn, has its own traits in this or that country. For example, the form of the dictatorship of the proletariat in China reflects the specific traits of the historical development of that country, traits which appeared in the process of the anti-imperialist, anti-feudal struggle of the alliance of the working class with the national bourgeoisie, etc. In a number of people's democracies there was a possibility of the participation of other political parties in the government on the basis of the policy of socialist construction under the guidance of the Communist and Workers' Parties. There was no such possibility in the USSR under the concrete conditions of the class struggle (not mentioning the participation in the government of the left Social Revolutionaries in the first months of the Soviet power). But all this does not change the essence of the proletarian state, of its economic policy directed toward socialist collectivization of production.

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Socialist collectivization is insolubly bound with liquidation of capitalist property in means of production. It includes establishment of social ownership of the basic means of production and a gradual, socialist transformation of agriculture. This means the formation of two types of the socialist property: state, all-people's, as the leading and dominating economic form of property; and cooperative, created on the basis of socialist reconstruction of the economy of small commodity producers — peasantry and household industry. Common to all countries building socialism, these radical changes in the sphere of property in the means of production represent a basic feature of the socialist revolution in the economic basis. The reformists not only are against socialist revolution in property relations, but lately retreat even from their former positions on questions of nationalization of the means of production in the framework of the capitalist countries. This may be seen, for example, from the program documents of the Labor Party, from the speeches of the leader of that Party, Gaitskell, in particular from his pamphlet: "Socialism and Nationalization." The position of a prominent member of that Party, Crossland, is characteristic. In his book "The Future of Socialism," he in general denies "the definition of capitalism by forms of property" (sic). With this as his starting point he affirms that contemporary England is no more a capitalistic country. In this way the problem of socialist collectivization of capitalist property is "removed."

The revolutionary socialist collectivization of the sphere of production and circulation is a general feature of the economic development of all countries of the world socialist system, whatever are the peculiarities of this process, in accordance with the economic laws. These peculiarities touch only forms, methods and tempos of the collectivization and depend upon the concrete conditions in a given country. In some cases, as for example in the USSR, the nationalization of industry proceeded rapidly; in other socialist countries more gradually, in several stages. In some cases nationalization took place without remuneration of the former owners (in the USSR), in others with remuneration (payment of compensation to the capitalists in a number of people's democracies); in China a system of remuneration was connected with peaceful transformation of capitalist industry into socialist by consecutive stages, with use of state capitalism, forms of mixed state-private enterprises, etc.

Under present conditions, when a powerful camp of socialism exists, the concrete forms of socialist revolution become more varied. The possibilities for peaceful establishment of the power of the workers and for peaceful socialist transformation of society have considerably increased. The use of all possibilities for peaceful transition to socialism fully corresponds to the Marxist-Leninist theory concerning socialist construction, class contradictions and class struggle during the transitional period. The class struggle remains the prime mover in the development of society during the transitional period to socialism. Peaceful transition to it does not preclude, but presupposes, a continuous struggle with the exploiting classes. At the same time it means that this class struggle does not take the forms of an armed rebellion, civil war, etc. Marxism-Leninism prefers a peaceful road to socialism, but this primarily depends upon the position and conduct of the exploiting classes themselves. That is why the peaceful road is not the only road, the universal and compulsory road to socialism, as it is sometimes presented. The peaceful development of the socialist revolution means creation by the working class of such a preponderance of forces that the bourgeoisie is compelled to give up armed resistance, is ready to reach a compromise with the proletariat in order to avoid sharp forms of liquidation of capitalist property and of the capitalist class, to receive a certain remuneration for their plants, a right to participate in economic construction, in political life, etc. V. I. Lenin pointed out that conditions favorable for the proletariat may come about in such a way that they "would compel capitalists to reconcile themselves with socialism and in a gentlemanly way [kulturno], as a group, to come to the side of socialism on condition of remuneration." ("Works," vol. 32, p. 317.)

After the victory of the February Revolution of 1917, Lenin and the Bolshevik Party stood for a peaceful establishment of the Soviet power; but the counterrevolutionary forces made this impossible. After the October Revolution Lenin several times suggested more peaceful forms of transition to socialism, but the exploiting classes refused, thirsting for civil war, trying to destroy the Soviet power. Lenin pointed out that in view of that we had to realize the dictatorship of the proletariat in its grimmest forms. Special sharpness and the specific forms of the struggle of the proletariat with the exploiting classes in the USSR were brought about by the circumstances about which Lenin said as early as 1919: "Gentlemen capitalists, you are guilty in that respect yourself. If you did not render such a violent, such a senseless, impudent and desperate resistance, if you did not form an alliance with the bourgeoisie of the whole world, the revolution would take more peaceful forms." ("Works," vol. 29, p. 188.) If the bourgeoisie in our country refused to reach an agreement on the basis of state capitalism under the dictatorship of the proletariat, the circumstances were quite different, for example, in China. Victory of socialism in the USSR, formation and strengthening of the camp of socialism, produced a great influence on the tactics of the world bourgeoisie In the capitalist countries the bourgeoisie is compelled in a number of cases to maneuver, to give concessions to the economic demands of the proletariat. In the countries of people's democracies (and it was especially strongly noticeable in China) it took into consideration the "experience" of the bourgeoisie in the USSR and the real relationship of the class forces. When the Soviet Union, under extremely difficult conditions, stood alone against the front of world imperialism, the Russian bourgeoisie from month to month, from year to year, based its policy on the expectation of the disappearance of Soviet power "in the near future." Under completely different international and domestic conditions, the Chinese national bourgeoisie entered the road of compromise with the working class, entered the service of the people's power.

Peaceful socialist transformation of China's economy represen a creative and systematic application in concrete Chinese conditions of the Marxist-Leninist theory of transition to socialism, of the Marxist-Leninist principle of class struggle. The Chinese are applying special forms of gradual transition to the nationalization of industry, socialist collectivization of the whole economy liquidation of the exploiting classes. Such forms became possible and necessary because they were realized through the dictatorship of the proletariat with the Marxist-Leninist party in the guiding role, with the state socialist sector in the leading role. Peaceful socialist transformation of China's economy was an original process of the class struggle with the bourgeoisie. The alliance with the national bourgeoisie not only does not preclude this struggle, but it presupposes this struggle. This may be seen from the so-called "struggle against five evils" carried out in China against various manifestations of resistance to socialist construction on the part of some representatives of the bourgeoisie. The construction of socialism, of course, is contrary to the class nature of the capitalists. It was just because the bourgeoisie had to surrender their positions and agree to obtaining remuneration for their enterprises that under concrete conditions in China peaceful socialist transformation of capitalist enterprises and re-education of the capitalists became possible.

How is all this connected with contradictions between the working class and the bourgeoisie? In any country, during the transitional period from capitalism to socialism, the basic contradiction is the contradiction, antagonistic in its nature, between the working class and the toiling masses on the one side and the class of capitalists on the other. In China where the national bourgeoisie had special features (it took part in the struggle for national liberation, in the anti-imperialist and anti-feudal struggle, and now is in service of the people's power building socialism) it became possible to transform to a certain degree the contradictions between the working class and the national bourgeoisie from antagonistic to non-antagonistic. "The national bourgeoisie," said Comrade Mao Tse-tung in February 1957, "is different from the imperialists, the landlords, and the bureaucratic bourgeoisie. Contradictions between the working class and the national bourgeoisie are contradictions between the exploited and the exploiters which in themselves are antagonistic. Under concrete conditions in our country, if we properly regulate the antagonistic contradictions between these two classes, they may turn into non-antagonistic contradictions, they may be solved in a peaceful way. If we regulate them incorrectly if we do not apply in respect to the national bourgeoisie a policy of unity, criticism, and education, or if the national bourgeoisie do not follow this policy of ours, then the contradictions between the working class and the national bourgeoisie may become contradictions between us and our enemies." (See his work "The Question of the Correct Solution of Contradictions within the People." Pravda Publishing House, 1957, pp. 5-6.)

At the present stage, when the socialist revolution in the sphere of ownership of the means of production has been basically completed in China, the non-antagonistic contradictions between the working class and the bourgeoisie are prevailing. However, as it is emphasized by the Communist Party of China, even now here and there these contradictions acquire an antagonistic character. It is enough to be reminded of the vehement attacks of the rightist bourgeois elements in China against the socialist road of China's development.

The forms of class relations with capitalists, applied in China as well as in other countries of people's democracy, are correct forms in the specific conditions of these countries. But such forms of class relationships could not be applied under conditions of socialist construction and class struggle in the USSR. The degree of sharpness of the class struggle depends upon the concrete situation evolved at the present stage in this or that country. Marxism-Leninism rejects the opportunistic view of the inevitable "falling off of the class struggle" during the transitional period. As is known, the right opportunists in the USSR advanced this thesis in the heat of the violent struggle of the kulaks against collectivization. Historical experience confirmed the possibility of the sharpening of the class struggle at any stage of the transitional period. Especially clear proof of this are the events in Hungary in the autumn of 1956. At the same time the assertions are mistaken and harmful that the continuous sharpening of the class struggle in the transitional period is inevitable and that even after the victory of socialism it will continue to grow.

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Marxism-Leninism teaches that socialism is a system of economy embracing cities as well as villages. An indispensable element of socialist construction is production cooperatization of peasant farms. An opposite point of view is presented by T. Kovalik in his article "Socialism without Mysticism" ("Zycie gospodarcze," No. 31, 1957). He constructs "new" formulae for socialism and for the transitional period. What is the author's source in his characterization of socialism? Who is a sufficient authority for him on the question of the essence of socialism? The author suggests following the definition of socialism given by... the extreme apologist of capitalism, Schumpeter. What are the author's conclusions? First of all, in his opinion, there may be different types of socialism (!) — "poor and rich," "more just and less just," democratic and undemocratic, etc., etc. Just as in Schumpeter! But let us go further. Socialism is presented by the author as a regime where "parallel to the socialist system there exists a system of small commodity producers and also remnants of capitalism." He asserts that the task of the transitional period is not substitution of private property in means of production with common, socialist property in the cities as well as in the villages. T. Kovalik considers that the task is narrower — to secure for the socialist system a predominant role in the country and to remove the economic and political basis of the bourgeoisie's domination. Presenting socialism as an economy of several types, in fact, a mixed economy with survivals of capitalism and of private farms in the villages, T. Kovalik attempts to combine what is impossible to combine. He ignores the contraposition of socialist and private property, different principles of reproduction in the socialist and private sectors. His "socialism" has lost its reality, it is based on two contradictory foundations: socialist industry with planned production in the cities on the one side and private property in the realm of agriculture, with domination of the market, constant, spontaneous birth of capitalism there, etc., on the other.

Being guided by his newly invented "criteria" of socialism T. Kovalik immediately makes a new discovery. It happens that socialism was built in Poland a long time ago. He writes: "To the question concerning our country: is this 'socialism'? answer: yes, and has been for many years." If we were to use is "criteria" it would appear that some ten years ago, when the basic means of production were taken over by the people's democratic state, socialism was established in Poland. True, the production cooperatives in Polish villages represent a small island in the sea of private farms. But this is of no importance from the point of view of the definition given by the author! T. Kovalik writes: "Who knows how great is the stability of the small peasant farms? Maybe a certain part of them would prefer to exist forever?" And the author comes to the conclusion that as socialism is present in Poland, "Is it not time to finish...with incessant mobilization of the masses for realization of the transition to socialism, etc.?" Succinct and clear! Such is T. Kovalik's position, but as the proverb says "the dream is terrible, but God is merciful." Socialist countries, guided by Lenin's cooperative plan, based on an alliance of the working class with the toiling peasantry, and with the guiding role of the working class, are advancing along the raod of gradual socialist collectivization of agriculture.

However, such attempts as this article by T. Kovalik again remind us of the necessity of systematic criticism of the "theory," which still has a certain circulation, that socialism must be built only in the cities, the theory of the "stability of the small peasant farms," conceptions denying the differentiation of peasant farms, which in essence aim at the capitalist road of village development, etc. The voluntary character of joining cooperatives, as well as the gradual character of transformation to cooperatives, with transition from lower forms to higher ones, are Lenin's firm principles. An artificial acceleration of the process of cooperatization brings only harm. At the same time, radically mistaken are those who advance opinions that the voluntary character of cooperatization is the same thing as spontaneity, according to the following principle: there are private and cooperative farms; let them compete, let the market decide who will squeeze out whom. The success of building cooperatives from peasant farms is impossible without guidance and assistance — economic, political, cultural, organizational — on the part of the socialist state; without constant realization of Lenin's thesis that each social form emerges only with the financial support of a certain class.

Though the general principles of cooperatization of peasant farms are the same, the peculiarities of the economic and political conditions in the countries of people's democracy brought to life a number of different concrete forms of socialist collectivization of agriculture as compared with those in the USSR. This is connected in particular with the question of nationalization of land. Nationalization of the whole land in our country was predetermined by the special character of the class relationships in Russia where peasant private property in land was relatively weak. In the countries of people's democracy it was quite proper to preserve peasants' private property in land. This could not fail to influence the process of cooperatization of peasant farms, in particular in greater use of transitional forms. Various forms of production cooperatives in the countries of people's democracy (differences in the degree of collectivization of means of production, of use of land, of collectivization of labor, of forms of income distribution, etc.) are determined by many factors. Among these factors are forms of land ownership and their use before the revolution and after carrying out of the agrarian reforms; the social structure of the economy and the degree of differentiation of peasants; the structure and level of development of agricultural development, etc. All these peculiarities should be carefully studied in the process of production cooperatization. Cooperatization of peasant farms in China and other countries of people's democracy, under different conditions of the class struggle mentioned above, was not accompanied by such expropriation of the kulaks as took place in Russia. In respect to admission of kulaks into production cooperatives in China, a differential approach is used.

There are also substantial differences in tempos and level of collectivization of agriculture in various socialist countries. Production cooperatization of peasants took place in the Chinese People's Republic on an immense scale, where this process in the main has been completed (97 per cent of peasants are in the cooperatives). Next is the Korean People's Democratic Republic (95 per cent of the farms), Bulgaria (the socialist sector embraces 90 per cent of the cultivated land), Czechoslovakia (64 per cent of agriculturally used area is in the socialist sector). On the other hand, there are countries where the part of the socialist sector (including production cooperatives) in agriculture is considerably lower. This is explained by special economic and political conditions in each country. Is there any relationship between the level of cooperatization of peasant farms and the level of industrial development and mechanization of agriculture in a given country? The facts show that there is no direct or inverse connection. It is not true that the less developed industrially a country, the higher (or, on the contrary, lower) is the level of its socialist collectivization of agriculture. Of course, socialist industrialization, technical reconstruction of agriculture, are of tremendous importance for the development and strengthening of productive cooperatization in the villages. The advantages of the cooperative regime in the villages could be fully realized only on the basis of advanced technique. But it is a mistake to think that without first carrying out technical reconstruction of agriculture, production cooperatization of peasants is impossible. Such an understanding of the connection of the productive forces and the productive relations, though to a certain degree extant, is a dogma, refuted by life.

The experience of the Chinese People's Republic shows that under definite conditions production cooperatization of peasant farms can be carried out even at a low level of mechanization of agriculture. The process of cooperatization of peasant farms should not be artificially delayed till completion of industrialization. In respect to cooperatization of peasant farms, China is now ahead of a number of European countries of people's democracy, though in the agriculture of those countries more machine technique is applied. Because of the existence of such a highly industrialized socialist power as the USSR and the powerful world system of socialism, in the specific conditions of China the victory of socialist property in the whole economy (including villages) became possible before realization of China's industrialization. The process of transformation of China into an industrial country, which is of tremendous importance for socialist construction, will continue even after the victory of socialist production relationships. As pointed out in the newspaper "Jenmin Jihpao" (January 1, 1958), when the system of socialist production relationships receives a material-technical base corresponding to it, then socialist society will be basically built. Then the socialist mode of production will be firmly established as a unity of production relationships and of productive forces. The necessary condition for this is industrialization of the country, which during the coming 10 to 15 years will secure in China the basis of modern industry and modern agriculture.

Of course, under conditions in the USSR, there was no possibility of such a systematic solution of the problems of collectivization and industrialization as can be seen now in China. On the basis of industrialization of the country, the socialist transformation of production relationships was carried out. It must be emphasized, however, that even for the transitional period in the USSR, the following scheme is not applicable: first there was a period of industrialization and then, after its completion, a period of collectivization of agriculture began. Actually our country first started industrialization, then it began a full collectivization which went on at the same time as industrialization was continued. Our collective farms at the beginning were in most cases weakly supplied with necessary machinery, and only later were they saturated with advanced machine technique.

The process of socialist collectivization of production is insolubly bound with the creation of the material-technical base of socialism, with the development of productive forces, with socialist industrialization. The tremendous advantages of the socialist system of world economy found their expression in the high tempos of industrial development in socialist countries. In 1957 the volume of industrial production in socialist countries exceeded the prewar level 4.5 times. The prewar level of industrial production (1936-1939) was exceeded in 1957 in Poland 5.8 times, in Czechoslovakia three times, in the German People's Republic 2.4 times, in Hungary about four times, in Rumania 3.3 times (in 1956), in Bulgaria seven times, in Albania 14 times, in Yugoslavia three times. By comparison with 1946 industrial production in the Chinese People's Republic increased (in 1957) 5.6 times, in the Korean People's Democratic Republic about 2.8 times, in the Mongolian People's Republic, in 1957, as compared with 1940, 4.9 times. Industrial production of the Democratic Republic of Vietnam showed a manifold increase.

In all countries building socialism the process of industrialization has a number of common features. Such common features are the socialist content of industrialization, its planned charact high tempos, use of the advantages of socialism, development of socialist competition, etc. At the same time, there are certain peculiarities of industrialization in various countries connected with economic, political, natural, geographic conditions of each country, the level of development of their production, technique, science, the presence of trained personnel, etc. The concrete forms and tempos of industrialization in the countries of people' democracy in many respects are different from the forms and tempos of the socialist industrialization of the USSR — in its time the only socialist country which was compelled in the shortest possible time to create a first-rate industry, able to supply its economy with all necessary products. Foreign and domestic conditions demanded especially strained tempos of industrialization and high norms of accumulation. Historical experience confirmed that it was the realization of industrialization at such tempos which permitted our country to be victorious in the Great Wa for the Fatherland, which had tremendous international consequenc

Countries of people's democracy are in a different, much mor favorable situation: each of them is using the economic and scientific-technical help of the USSR and of the whole camp of socia ism, getting great economic advantages from the international socialist division of labor. Because of that, the countries of peopl democracy may develop their industry at less high tempos than was done in the USSR, and they do not have to aim at producing all kinds of products (the problem of creation of a comprehensiv system of branches of industry stands only before China). Each country enjoys the possibility of developing those branches of production for the growth of which it has the most favorable economic and natural conditions. It also can, to a greater degree than was possible in the USSR during the period of industrialization, consider the economic effectiveness of the investment of present and past labor. The practice, which had a place at one time in some countries of people's democracy, of copying to a certain degree mechanically the concrete forms and tempos of industrialization in the USSR, was mistaken and brought certain harm. The favorable conditions, pointed out above, permit the countries of people's democracy to apply lower norms of accumulation than those which were dictated by concrete conditions in the USSR in the transitional period of carrying out industrialization. However, these norms should be sufficient for securing necessary tempos of expanded reproduction and technical progress. This requires that the tempos of growth of labor productivity in industry should exceed the tempos of the rise of wages.

Securing the preferential growth in production of means of production is a necessity for the socialist countries. This does not mean that in each country there should be such a substantial difference in the tempos of development of heavy and light industries as was necessary in the USSR in the years of developing industrialization. In each country there must be a differential approach in relation to the structure of social production and development of this or that branch, taking into consideration the economic possibilities of the given country. The difference in the levels of industrial development of socialist countries is decreasing. But it is not necessary for all socialist countries to have approximately the same proportion of the total in heavy industry or of all industry in the economy as a whole. Further, as it was pointed out in the magazine "Communist" (see No. 15, 19 p. 21), there are cases when countries possessing relatively sm resources cannot begin industrialization with the development of heavy industry. Their economic development for some time ma rely on the heavy industry of other socialist countries. Of cours this presupposes that the creation of an advanced material-production base is necessary for the full production of the socialist society in each country.

Building of socialism in each country demands realization of the Leninist principle of democratic centralism in the managem of the economy, which is determined by the very nature of the Socialist regime. The development of the economy of any socialis country is unthinkable without state centralized planning of the economy. This is economically determined by the character of the common socialist property, the peculiarities of formation a development of the socialist economy. The whole people's, state property serves as the economic basis of centralized planning. Its dominating and leading role is an objective necessity for socialist construction. This requires corresponding relationships between the state as a whole and its enterprises.

Comrade Gomulka in his report at the Ninth Plenum of the CC of the Polish United Workers' Party (in May, 1957) criticized severely a conception according to which "the prices of the commodities produced by individual plants would be determined by the market spontaneously, on the basis of the law of demand and supply. Each plant would determine the character of its production independently from other plants. Investment of capital would also be dictated by the market, only with worse effects than under capitalism..." Stressing that under such conditions the laws governing capitalist economy would start functioning fully — only with worse results — Comrade Gomulka said: "In the economy there must then disappear central planning and management, which is the basic feature of socialism." ("Communist," No. 7, 1957, p. 48.)

Centralized planning should be combined with the development of the initiative of local organs, plants, and the whole working people, increasingly drawing the masses into the management of the economy. This is indissolubly connected with socialist democracy. The degree of centralization in planning and management of the economy during the transitional period greatly depends upon the concrete economic and political conditions under which socialist construction is progressing in a given country. The present circumstances in which the countries of people's democracy are realizing the transition to socialism — the existence of a camp of socialism — permit them to forego, in a number of cases, the degree of centralization of economic management which was necessary in the transitional period in the USSR, as a result of a number of specific conditions. Lately, in all countries of people's democracy a process of increasing the economic role of the local organs is taking place. There is a certain expansion of the operative independence of the plants and a strengthening of mass participation in the management of the economy. However, much remains to be done in these fields. Reorganizing of the management of the economy is being carried out not according to a predetermined pattern but considering the peculiarities of each country (the state of its economic and political conditions, the level of its industrialization, the structure of its production and its specialization, the size of its territory, its historical traits, etc.). In the countries of people's democracy the role of the labor unions is being expanded, as well as of production conferences and economic conferences of plant personnel. At the same time, as one of the forms for the activization of mass participation in the management of enterprises, workers' councils have been established in Poland, and in Hungary, factory councils.

Realization of the principle of democratic centralism in the management of the economy is closely connected with the development of economic stimuli. Some economists, as, for example, F. Berens of the German Democratic Republic, contrast centralized planning with economic laws and material incentives, and consider centralized planning as "naked" administrative bossing in the economic field. ("Wirtschaftwissenschaft," special issue No. 3, 1957.) This is a great mistake. Centralized planning is based on objective economic laws, it must be based on the greatest possible use of economic levers and stimuli. For any country building socialism the use of economic levers for increased production in the interests of society is in accordance with economic laws. So also is the application of the principle of material interestedness for each worker, the material interest of the personnel of each plant in the increase of labor productivity, the greater application, strengthening and development of cost control: These are objectively necessary forms of conducting a planned socialist economy.

The existence of the powerful camp of socialist countries and their economic collaboration create for all countries of people's democracy more favorable possibilities for the development of economic stimuli, cost control and the principle of material interestedness than was possible during the transitional period in the USSR. They now have a much greater possibility of increasing the consumption fund which is of great importance for the wide use of the principle of material interestedness. In their practice of economic construction the countries of people's democracy creatively apply in their transitional period the experience of the Soviet Union in perfecting economic levers in its present, high stage of socialist development.

Lately in the countries of people's democracy much has been done in increasing the role of economic stimuli for strengthening cost control. The material interestedness of peasants in the development of agriculture was increased (purchasing and delivery prices were increased, compulsory deliveries of agricultural products were lowered or abolished, etc.). The interestedness of the workers of enterprises in improving economic indices was strengthened. However, there still remain many unsolved problems of increasing the material interestedness of the workers in increasing the productivity of labor and lowering costs; the application of new technique; the perfection of the system of wage payments and bonuses; improving the system of prices in the economy; making more and more branches of the socialist economy self-supporting; increasing the role of profit as a stimulating factor in the work of the plants, etc. Without serious strengthening of the role of economic stimuli, it is impossible to solve the problem of the simultaneous growth of consumption and accumulation by means of a sufficiently high increase in the tempo of growth of labor productivity, as well as by economizing resources and, on this basis, obtaining a systematic lowering of production costs.

The planned development of the economy directed toward socialist construction, toward raising the material and cultural levels of the workers, means obligatory use of the economic laws of socialism.

Formation of the camp of socialist countries and strengthening economic collaboration between them signifies a tremendous expansion of the sphere in which socialist economic laws are applied. These laws begin to act not only within the frontiers of the economy of individual countries but in the system of socialist economy as a whole. This is not a simple quantitative change; it is an important qualitative jump. With the planned use of economic laws on the scale of the whole socialist commonwealth of states, the advantages of the socialist mode of production are realized to a much greater degree.

As the international socialist division of labor, and cooperation between the countries of socialism expand, newer and newer possibilities are created for the use of the laws of planned economic development in the interests of the rapid rise of production and popular consumption in these countries. Now, on the basis of the coordination of plans, the proportions in the process of production are determined on the basis of a better analysis of the relative economic effectiveness of the production of particular commodities in this or that socialist country. Under these conditions economic effectiveness may be determined, not only on the national scale but also in respect to the world system of socialism. This growth increases the possibilities of the rational use of the productive resources of all socialist countries. This results in economic advantages to each country in particular and to all countries of socialism as a whole.

The international division of labor among the socialist countries demands a careful analysis of the levels of productivity of labor and production costs of this or that commodity in each of these countries, as well as analysis of the average (socially necessary) production costs in the world socialist system of the economy as a whole. Beside other — economic and political — factors, we should consider costs and rentability of commodities in our coordination of plans of production and exchange. Of great importance is the study of questions of price formation in the world socialist market, with analysis of conditions of production and exchange inside the world socialist system, as well as of prices on the world capitalist market. This signifies the necessity of studying concrete forms for the systematic use — on the scale of the entire socialist camp — of law of value.

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The basic content of our epoch is the transition from capitalism to socialism, begun by the October Socialist Revolution in Russia. The creative use of the general, principal laws of socialist construction, verified in practice, laws inherent in the nature

(Continued on Page 40)

V. Somov:

The Tula Economic Council and the Problem of Developing Coal Production in the Moscow Basin

Lately some economists expressed opinions about the inadvisability of developing the Moscow coal basin and suggested using coal brought from afar for local consumption. For example, Z. Chukhanov and L. Khitrov wrote that "Now it is impossible to find even one convincing argument for developing production of Moscow coal." (See their work "Technological Use of Fuel for Production of Power," 1956, p. 30.) This point of view is shared by M. Shchedrin ("Planned Economy," No. 2, 1957, p. 5). These authorities use only one criterion for the advisability of coal production in the Moscow basin, namely, the cost of production per ton of coal at the mines. At the same time they consider that the cost of Moscow coal at its place of consumption, in the Central industrial region, in terms of theoretical fuel, is considerably higher than of coal brought from afar. It is not an accident that in the Moscow coal basin in 1956 the construction of twelve mines was put in abeyance and the start of construction of a large Begichev coal pit with productive capacity of several million tons was delayed. In the last two years construction of only two new pits was started. The investment plan for 1957 was cut almost by 130 million rubles; the planning organs did not foresee the opening of new pits during 1958-1960.

Such actions cannot be considered as correct. During the years of Soviet power, in the center of the country, an extensive coal mining industry was created, with an annual production of 40-42 million tons of coal. This basin, in the volume of its coal production, now occupies third place in the USSR (after Donbas and Kuzbas). On the basis of Moscow coal and impurities associated with it, which are used as raw materials, a powerful industrial complex has been created, including a chemical combinate and dozens of plants producing building and fire-resisting products (chamotte brick, clinker brick, insulation brick, etc.). On the basis of Moscow coal, local peat and hydroenergy, the Central Power System was created. It is the most powerful in the USSR, and has made possible the electrification of all processes of coal production in the Moscow basin and served as a basis for the emergence of new branches of industry consuming much electricity (electric steel, etc.).

The presence of a large fuel and power base in the center of the country permitted the socialist state to achieve more quickly a transition from firewood to mineral fuel in the fuel balance of the Moscow region, to cut down substantially consumption of fuel brought from afar, and in this way to lower expenditures of social labor connected with its transportation. For example, the Kashira electric power station alone, during 1921-1947, transformed 30 million tons of Moscow coal into electricity. This meant a saving of about 15 million tons of Donets coking coal for the economy and spared the work of railroad transport, which may be estimated at about 360 million ton-km. a year.

It is known that transportation of goods needed by the consumer is an essential part of the cost of production.

Marx wrote: "The absolute amount of value added to goods by transportation, under equal conditions, is in direct ratio to the productive power of the transportation industry and in direct ratio to the distances over which the goods are moved." ("Capital," vol. II, p. 147.) Cutting down long, unreasonable haulages is one of the forms of growth of social labor productivity; it means a saving of social labor.

During the years of existence of the Soviet power the Moscow basin produced about 500 million tons of coal. This means a saving of about 250 million tons of Donets coal. What is the size of the economy thus obtained? The radius of transportation of Moscow coal to its places of consumption is 150-200 km. For transporting these 500 million tons of coal about 180 billion ton-km. were needed. Thus the net economy in cutting down the haulage of Donets coal was about 300 billion ton-km.

Moreover, substitution of Donets coal with local Moscow coal made it possible to save huge funds which would be necessary for the construction of a new trunk line, similar to that of the Moscow-Donbas line. If it were not for the Moscow basin, the available capacity of railroad transport would not be sufficient to secure the haulage of Donets coal in quantities needed in the Central industrial region.

About 20 per cent of the cost of transported goods is made up of fuel used by railroad transport itself, so that an additional economy on that account makes about 30 million tons of coal a year.

As we see, reducing consumption of Donets coal because of substitution of Moscow coal during the years of existence of Soviet power made possible saving large amounts of social labo saving Donets coking coal for the national economy, and freeing means of transportation for carrying other goods for the econom

As early as 1918, V. I. Lenin emphasized the necessity of usi poorer grades of fuel, including coal, for production of power w minimal expenditure for production and transportation of the fue The history of the development of the Moscow coal basin shows that at all stages of socialist construction the exploitation of the Moscow coal basin was economically advisable from the point o view of development of the whole economy of the country, and especially the industrial development of the Central industrial region of the USSR.

The development in the center of the country of a powerful fuel and power base is of great economic and defense importanc During the years of the Great Patriotic War the Moscow basin playe a decisive role in securing fuel for the industry of Moscow and the Moscow region, as well as railroads near the front lines. During that period Moscow coal made up more than ninety per cent of the coal balance of the capital and the region.

From all this it naturally follows that the cost per ton of Moscow coal for the consumer cannot be the only criterion for the planned development of the coal industry in the Moscow region. It also is necessary to consider the complex use of the useful minerals produced, specialization in the development of the Central industrial region's economy, its role in the industrial development of the whole country, and strengthening of the economic power of the USSR. The necessity of the further development of the Moscow coal basin is determined by its advantageous geographic location. Because of that, transportation of Moscow coa to consumers of the Central industrial region costs the state si to seven times less than coal brought from afar. The work of th railroads needed for bringing Donets coal to the center of the country is cut down approximately by 8-10 billion ton-km. a yea

However, in spite of the growth of coal production in the Moscow basin, its volume cannot satisfy the coal needs of industria plants of the center. The disproportion between the volume of coal production in the Moscow basin and the demand for coal in the Central region is increasing. For example, in 1956 the consumption of coal in the Central region exceeded the output of co in the Moscow basin by about 35 million tons, and in order to cover this deficit, there were brought to this region from other basins about 15 million tons of coal. In connection with the use by the Central industrial region of distant coal, the cost of transportation in the 1950-1956 period amounted to about two billion rubles. The loss of social labor reached approximately twelve million labor days.

It is also necessary to consider the fact that Moscow coal ma be used in greater and greater quantities as a raw material for the chemical industry. The planned speedy development of oil output in the near future, and especially of natural gas, will not eliminate the demand for Moscow coal by the local thermal power stations, the Shchelkov plant of synthetic gases and other chemical enterprises. Parallel to the increase in production of natural gases, production of synthetic gas and subterranean gasification of coal will grow. Considering the increasing construction of rural power stations and a sharp increase in the mechanization of agriculture, the demand of agriculture for local mineral fuel will sharply increase. In order to satisfy this demand, production of coal in the Moscow basin should be increased several times. This would make it possible to end the consumption of firewood, which reaches annually in the Central region 25 million cubic meters, resulting in the rise in the cost of fuel and the destruction of local forests.

In determining the perspectives for developing the Moscow basin, it is necessary to take into consideration the constant improvement of mining technology, methods of mining and organization of labor. On this basis there is a systematic growth of labor productivity, and a decline in the expenditure of labor and the cost of coal.

Considering all these circumstances, including the apparent tendency toward lowering the expenditure of labor and the cost per ton of coal, the Tula Economic Council outlined concrete measures for further development of coal mining in the Moscow basin.

This council analyzed the existing situation in respect to the cost of Moscow coal and coal brought from afar to the consumer in the Central industrial region. The research workers of the Council proved that the cost of the distant coal is considerably higher than that of the locally produced coal for the consumer of that region. Even if we use only one criterion for determining the location of coal production according to regions of the Soviet Union — the cost per ton of coal for the consumer — continuation of coal mining development in the Moscow region becomes clearly advisable.

Let us consider in some detail the dynamics of the cost of Moscow coal and possibilities for its reduction.

During the post-war years (1946-1956), the productivity of labor in this basin increased by 30 per cent as compared with 1940. The reduction of the labor time needed for producing one ton of coal by 20.3 per cent in 1954 (with 1940 as 100) found reflection in the level of costs, which systematically fell in the post-war years.

Changes in the Cost per Ton of Coal (in Rubles of Comparable Purchasing Power)

	1950	1955	1956
Moscow coal	65.82	55.72	56.73
Tula coal	67.47	63.19	62.91
Average for the Moscow basin	66.66	59.45	57.82

As may be seen, in six years, the cost of Moscow coal fell by 13 per cent. Because of the development of mechanization and automation of coal mining the structure of expenditures for mining one ton of coal in the Moscow basin during the same period somewhat changed:

Structure of Cost of Mining One Ton of Coal in the Moscow Coal Combinate (Percentages of the Total Cost)

Years	Materials used	Fuel	Power received from outside	Wages and benefits	Amortization	Other money exp.	Commercial expenses
1950	18.0	4.0	3.8	64.2	4.0	3.2	2.8
1956	17.5	4.0	3.8	61.3	6.2	4.7	2.5

These data show that the part of wages in the cost per ton in six years fell by 2.9 per cent. With increasing concentration of production the part of commercial and other expenditures per ton of coal produced also fell. A small decrease in the cost of materials is connected chiefly with more economic use of timber supports.

With the application of new mining technique, mechanization, and automation of production, the part of past labor per unit of production is increasing. This found its reflection in the growth of the part of amortization expenditures per ton of Moscow coal during the same period by 2.2 per cent.

It is important to point out that the lowering of the part of present labor per ton of coal proceeded faster than the growth of the part of past labor. This means that the productivity of social labor was increasing.

An analysis carried out by the Moscow Region State Institute for Designing Mines shows that in fact the cost of one ton of Moscow coal (in terms of theoretical fuel), including transportation expenses to the place of consumption in the Central industrial region, is lower than the cost of fuel brought from other regions.

A Comparison of Coal Costs in the Central Industrial Region

Origin of coal	Cost per ton in terms of theoretical fuel with inclusion of cost of transportation (in rubles)	The same as percentages of the cost of Moscow coal
Moscow coal	158.00	100
Donets coal	158.86	101
Donets coal gas	164.81	104
Karaganda coal	189.00	120
Pechora coal	228.00	144
Kuznetsk coal	182.15	115

These data show that the cost per ton of Moscow coal for the consumer of the Central industrial region is lower than of coal brought from afar. In fact the cost of Donets coal (in terms of theoretical fuel) for the consumer of that region is higher than Moscow coal on the average by three per cent. The cost of Kuznetsk, Karaganda and Pechora coal is considerably higher than the cost of Moscow coal.

In spite of the substantial growth in the scale of coal production, the Moscow basin now satisfies only half the demand for coal of the Central industrial region. The other half is brought from other basins of the country. In 1956, of the total amount of coal consumed by this region, 50.6 per cent was contributed by the Moscow region, 35.2 per cent by Donets coal, and 14.2 per cent by eastern and Pechora coal. As a result, the state is compelled annually to spend unnecessarily large funds. For example, in 1956, according to the Moscow Basin Institute for Designing Mines, unnecessary expenditures connected with transporting coal from afar to the Central industrial region amounted to more than 500 million rubles. Transportation of Donets coal to the center of the country cost approximately six times more than transportation of Moscow coal to the consumer. Transportation of one ton of Donets coal to the Central industrial region (in terms of theoretical fuel) cost 45.3 rubles for anthracite and 37.10 rubles for bituminous coal, while actual transportation cost for one ton of Moscow coal to the consumer was only 5.43 rubles (in terms of theoretical fuel). Such a large economy, obtained from smaller transportation expenditures is a result of the extremely advantageous geographic location of the Moscow basin which is in the center of the consumption of its coal. It is also known that transportation which permits loading of freight cars on their way back to the mines sharply reduces the cost of haulage.

Consumption of Moscow coal in power station furnaces is economically very effective. For example, the average cost of one kwh. of electric energy of Moscow stations using Donets coal with trademark "T" is 9.14 rubles and its fuel component is 6.25 rubles. The average cost for the stations using Moscow coal is 8.81 rubles and its fuel component — 6.09 rubles.

The Tula Economic Council has secured a systematic growth of the volume of coal mining. The average daily output of coal in the Moscow basin in 1957 was 3,500 tons above the level of production in 1956. The Economic Council planned, and now is carrying out, concrete measures directed at raising the output and sharply lowering the cost of coal in the next several years. It is known that the basis of a consistent growth of labor productivity is technical progress, improvement of mining technique and its better application.

The Moscow coal basin lies in the center of the county where there is a strongly developed machine-building industry. However, in respect to the level of mechanization of coal mining our basin is behind others; the data of the former Ministry of Coal Mining of the USSR show that the Moscow basin was, in respect to mechanization, below others. For all enterprises of the former Ministry of Coal Mining, the per cent of conveyor mechanization in 1956 amounted to 36.5; in the Moscow region the corresponding figure was only 8.8. In 1957, mechanization of coal loading in the Moscow basin was doubled. Lagging of the Moscow basin in the degree of technical equipment was to a certain degree caused by the fact that the former Ministry of Coal Mining of the USSR supplied this basin with coal combines which were not suitable for the peculiarities of the mining-geological conditions of this basin. Up to now the mines of the Moscow basin have been supplied with coal combines built up for conditions prevailing at the Donbas mines.

Taking into consideration that in the Moscow region there is a developed machine-building industry, the Tula Economic Council worked out measures for increasing mechanization and automation of coal mining in the Moscow basin. By 1965, it is planned to bring the mechanization of coal loading in stopping faces to sixty per cent of the total. This will make it possible to increase substantially the productivity of labor in the Moscow basin and cut down the cost of coal. At the same time it is planned to bring the level of mechanization of drifting in preliminary work up to 75-80 per cent. It is planned to make all freight elevators automatic and to change the system of ventilation and conveyer lines to remote control. This will make it possible to free in the Tula coal combinate about 4,000 auxiliary workers. Substitution of manual labor with machine work and the transfer of auxiliary workers to basic production should further lower the cost and labor per ton.

All measures for increasing mechanization and automation of basic and subsidiary processes planned by Tula Coal will make it possible to increase the average monthly productivity of labor by 25-30 per cent and to lower the cost per ton of theoretical fuel by about six rubles as compared with 1956. Bringing mechanization here to the level of Donbas and Karaganda will make it possible to lower the cost of Moscow coal by 20 to 25 per cent as compared with 1956.

The experience of the best mines of this basin (No. 1 Kamenetsk, 35, 22, 38, 2-b Kamenetsk and others), where 70 to 100 per cent of the coal is produced by combines, shows that their cost per ton of coal is lower by 25-35 per cent than the average cost for the Moscow basin. This means that further mechanization and automation of the processes of coal mining will create real possibilities for a substantial lowering of cost per ton in this basin. The Economic Council took a number of measures for the introduction of a new mining technique applied to specific local conditions. Now at some mines of the Moscow basin experiments are being made with the new cleaning coal combines K56 and K57. Individual mines are experimenting with mechanized supports for the cleaning faces in the basin. In the mines where these supports are applied, the productivity of labor is considerably increased and the expenses for supporting timbers are cut several times. This is of great importance for lowering per-ton cost, because expenses for supporting timbers in this basin make up about 20 per cent of the total costs.

An important circumstance, increasing the cost of Moscow coal, is the fact that many of the basin's mines are relatively small (with annual output of less than 300 thousand tons). If we exclude them, the average cost of mining here is about 130 rubles per ton of theoretical fuel. In view of this, finding the optimal size of the mines is one of the basic questions of the perspective development of the Moscow region. Concentration of production is a means of increasing productivity of labor, lowering labor expenditures and the cost of coal. Up to now the new mines, which were opened here for exploitation, were mainly of 200-400 thousand tons annual capacity. An analysis of the economic indices shows that the construction of larger mines brings better economic results. The presence of large surveyed deposits makes it possible — where geological conditions are favorable — to build new mines of 400-600 thousand tons annual capacity and this would permit sharply lowering the expenditure of labor and the cost per ton, and cut down the relative investment 1.5 times, as compared with mines now in operation which produce 200-300 thousand tons of coal a year.

Experience shows that the cost per ton of coal in the larger mines is considerably less than in the small and average mines. If we assume the cost at mines with an annual output of coal of 300,000 tons as 100, mines producing 900,000 tons and more a year have costs 35 per cent lower. Taking into consideration the advantages of the larger mines, the Technical Economic Council recommended "to start, in 1958, construction of larger mines in locations favorable from the production point of view..." At the same time the Tula Economic Council drafted concrete measures for lowering costs of the technological complex of new mines. With this aim in view it suggested to the designing organizations that they examine the design of the technological complex of mines and make suggestions for its maximal simplification.

The experience of the five months of work of a small open pit of the Don Coal Trust, built with our own resources, shows the great advantage of the open cut mine under local conditions. Here technology is simpler, there is no need for supporting timbers, productivity of labor is three to four times higher, as compared with the usual methods, and the cost per ton of coal is 2.5 times lower. The experience of this open pit shows the enormous possibilities of open cut mines in the Moscow basin. With this method, the process of coal mining is more intense, elements of production are better used, and there is a substantial economy of social labor. Preliminary calculations show that with the start of exploitation of the Kimov and Begichev open cut mines, the average monthly productivity of labor per worker in the Tula Coal Combinate will be increased by 3.5 tons and the cost will be lowered by about three rubles.

The Tula Economic Council made this decision: beginning with 1958, to secure extensive development of open mines' production of coal by constructing such mines of 1.5-2 million tons annual capacity, as well as smaller open mines producing 150-300 thousand tons a year. It decided to prepare quickly a perspective plan of development of such mines in the Moscow region for the next five years.

A serious defect of the work of the Moscow Coal Basin is the work of certain mines at a loss. The cost of one ton of coal produced here is substantially above the sale price. Because of that, the state is compelled annually to subsidize production through its plan. Considering the experience of better mines which do not bring losses, the Tula Economic Council took measures for the development of socialist competition for giving up of the subsidies and for profitable work at the mines. As a result, collectives of about 20 mines gave up state subsidies and now work profitably. The Economic Council believes that there are possibilities in the next two or three years to make the work of all mines of this basin profitable.

The measures drafted by the Economic Council, directed at the mobilization of available reserves and development of the creative initiative of the working masses for increasing labor productivity and lowering cost per unit of production, will, undoubtedly, bring positive results in the near future. This will contribute to the solution of the task set by the directive of the 20th Congress of the CPSU — to secure increase of coal production in the Moscow basin, which is of great importance for the development of the productive forces in the Central Industrial Region.

E. Kasimovsky:

Reserves for Lowering the Cost of Industrial Production

The 20th Congress of the CPSU set before industry the following task: on the basis of preferential development of heavy industry, continuous technical progress, and an increase in labor productivity, to secure a further great upsurge in production.

The solution of this problem depends to a considerable degree upon success in mobilizing reserves inside the plants: increase in labor productivity, better use of all means of production, economy of monetary funds. The lowering of the cost of production is a generalized monetary indicator which characterizes the degree of the use of all reserves, and the growth of productivity of social labor (an economy of present and past labor). The cost of industrial products is being systematically lowered. In the years of the Fourth Five-Year Plan, it was lowered by 17 per cent; during the years of the Fifth Five-Year Plan it was lowered by 23.3 per cent; in 1956 — by 3.4 per cent. The plan for 1957 foresees lowering costs by 2.8 per cent. During the first half of the year, they went down by 1.8 per cent. As the scale of total production increases, the total economy received from the lowering of costs grows. If, in 1940, each percentage reduction in cost of industrial products saved 1.5 billion rubles, in 1950 it saved five billion rubles, and in 1957 — more than 7.5 billion rubles. This sum is sufficient to build more than four million square meters of housing floor area.

A systematic lowering of cost is a result of the conscious use by socialist society of economic laws, is a result of labor efforts of tens of millions, who struggle for the economy of materials, financial and labor resources.

Under socialism the action of a law discovered by Marx, the law of the increasing productivity of labor, received an unlimited field of application. Under capitalism, as pointed out by Marx, this law does not have absolute significance (see his "Capital," vol. III, p. 273). The productivity of labor under capitalism is growing slowly, unevenly, and in some years it falls. For example, from 1897 to 1941, in the manufacturing industry of the USA, the productivity of labor increased 3.3 times. But during this 45 year period, it fell during five years (see Kuchinsky, "History of Labor Conditions in the USA from 1789 to 1947," State Publishing House of Foreign Literature, 1948, p. 295). Capitalist costs of production are also falling slowly, not systematically, and in some years they are increasing.

Under socialism the law of increasing productivity of labor finds its expression as a law of continuous growth of labor productivity. What the genius of Marx foresaw in his time now has been realized: he pointed out that "Economy of time as well as planned distribution of working time among the different branches of production remains the first economic law at the basis of collective production. Under these conditions it becomes a law given to a much greater degree." ("Archives of Marx and Engels," vol. IV, 1935, p. 119.)

The material basis for the action of the law of the continuous growth of labor productivity is technical progress, improvement in the organization of production and labor.

Productivity of labor under socialism is growing from year to year by tempos which are far beyond those of capitalist countries. For example, in the industry of the USSR, the productivity of labor in 1956 was 7.3 times higher than in 1928. This means that now a worker of socialist industry on the average produces in one hour only a little less than he was producing in 1928 during the whole working day. The productivity of labor in the USA's industry during the same period increased only 1.6 times, and in the Federal Republic of Germany during the period of 1928-1955, only 1.7 times (see "Countries of Socialism and Capitalism in Figures," State Publishing House, 1957, p. 57). Continuous growth of labor productivity is the most important source for the systematic reduction of the cost of industrial production.

In this lowering of cost under socialism an important part is played by the use of the law of planned, proportional development of the economy. Of great importance in this connection is the rational distribution of production, bringing industries closer to the sources of raw material and places of consumption of its products. Creation of a powerful industry in the eastern regions of the country permitted a considerable reduction in the average cost of production. This was a result of equipping the new plants at a high technical level and the consumption by these plants of cheaper raw materials and fuel, as well as of lowering transportation expenses, because industry was brought closer to the sources of raw materials, fuel, semi-finished and finished goods and to the points of processing and consumption.

Created during the years of Soviet power, Magnitogorsk and Kuznetsk metallurgical combinates produce the cheapest metal in the country. The Dneprovsk metallurgical plant produces the cheapest metal as compared with other plants in the south; yet its pig iron cost, in 1956, 73 per cent more than at Magnitogorsk; the open-hearth carbon steel there cost 71 per cent more than at Magnitogorsk.

The cost of oil produced in the regions of the Volga and the Urals is only 33-40 per cent of the average cost in the country. This is due to the more favorable geological conditions and wide use of rational methods of exploitation.

The cost of coal produced in the east is also lower than the average for the country, which is the result of better production conditions and the possibility of using open work methods. For example, if we take 1956 as a basis for comparison, production of one ton of coal at the Kuzbas Coal Combine was 19 per cent, Chelyabinsk Coal 32 per cent, and Karaganda Coal 39 per cent, cheaper than the average cost of coal in the mines of the Ministry of Coal Mining. If we compare the cost of coal produced by underground mines, still the cost of coal in the eastern regions will be lower than in the Donbas.

With the development of technique, improvement in the organization of production, the training of personnel, increase in the exchange of the best experience, and the growth of socialist competition, the reserves for lowering cost are increasing still further. The task is to find them and use them fully.

The analysis of the data of the reports on costs shows the reserves for reducing them further. Such reserves should be divided into two groups. First — current reserves which become apparent from a comparison of the reports and planned data. These are, so to speak, lying on the surface. The second group — perspective reserves. They become apparent through comparison of costs of similar products, manufactured in a number of enterprises, and also through analysis of the state of technical equipment, technology and organization of production, applied by various enterprises. Use of these reserves is connected not infrequently with the necessity for additional capital investment, with changes in technology and the organization of production.

The availability of reserves may be seen from the fact that annually tens of thousands of enterprises do not fulfill plans for lowering costs. In 1956 out of 26 industrial ministries, 14 have not fulfilled plans for lowering costs.

The losses from such nonfulfillment in 1956 in the enterprises of seven industrial ministries alone amounted to 3.3 billion rubles.

An analysis of the reports shows that in many cases the plan for lowering costs anticipated smaller lowering of costs than should have been anticipated. Only this can explain why many enterprises overfulfilling plans have large unplanned losses from rejected production, losses which are being cut down only very slowly (about 0.1 per cent a year) and on the average amount to three billion rubles a year.

Below are given data for implementation of the plan for lowering costs and losses from rejected production during the first quarter of 1957:

	Reduction of costs of production		Losses from rejected products (in million rubles)
	Planned	Actual	
	as per cent		
Ministry of Tractor and Agricultural Machine Bldg.	5.7	6.5	46
Ministry of Transport Machine Bldg.	3.3	3.7	36
Ministry of the Automobile Industry	2.0	2.6	33

The combined data for carrying out cost plans cannot reveal the real scale of cost reduction of industrial products because overexpenditures of some enterprises are covered by the economy obtained by others. For example, in 1954, more than one-half, and in 1955, more than a quarter, of all industrial enterprises of the country did not fulfill goals for lowering costs. In 1954 alone, as a result of nonfulfillment of plans for lowering costs, total losses amounted to about ten billion rubles.

But even detailed data of the fulfillment of plans for lowering costs in the enterprises do not sufficiently show all these reserves because enterprises fulfilling plans in one kind of expenditures make overexpenditures in others. For example, enterprises of the Ministry of Power Stations in 1956 lowered costs as compared with planned ones by 397 million rubles. However, comparison of expenditures item by item shows that the enterprises of that ministry could save much more — about 509 million rubles — if they would not make overexpenditure of 112 million rubles in certain items.

Combined, though not complete, data for only 12 ministries show that overexpenditures on individual items reached, in 1956, a sum of about 1.9 billion rubles. These data do not reveal the full size of possible economies. For example, in preparing combined reports on enterprises in the higher economic organizations, the overexpenditures of some enterprises are cancelled out by the economies of others. For example, in 1956 the Likhachev Moscow Automobile Plant overfulfilled the goal for lowering costs and received about 6.5 million rubles of economies above the plan. But if this plant would not exceed the expenditures foreseen by the plan in some other items, in particular in the cost of the management of the plant, and would avoid large losses from rejections, the economy above the planned one would be almost three times as high — about 17.5 million rubles. In the combined reports of the Ministry of the Automobile Industry of the USSR, this fact was not shown.

Thus full data by items of expenditures, where economies and overexpenditures by each accounting entry are shown separately for all enterprises of trusts, combinates, economic councils and ministries, may reveal the real state of reserves for lowering costs. It is important that in the analysis of enterprises' reports on costs, there be differentiation, that is, that overexpenditures by individual entries of one enterprise not be hidden by the economies of other enterprises for the same entry.

For finding reserves for lowering costs, of foremost importance is a comparison of costs of the same types of products produced by several enterprises. For example, as was mentioned, the cheapest pig iron and steel were produced, in 1956, by the Magnitogorsk metallurgical combinate, while the most expensive pig iron (3.6 times more expensive) — by the Cherepovets metallurgical combinate, and the most expensive steel (2.7 times more expensive than at Magnitogorsk) — at the Omutninsky plant. Such is the degree of fluctuation! While in 1956 the average cost of one kwh. was 8.68 kopeks in the power stations of the USSR Ministry of Power Stations, the cost amounted to 4.3 kopeks in the South Kuzbas Power Station, 15.24 at the Red October Power Station of Lenenergo, and 17.39 at the Klasson GRES. The cost of a DT-54 tractor at the Stalingrad tractor plant and at the Kharkov tractor plant, in 1956, was almost 4,000 rubles lower than at the Altai tractor plant.

These differences in costs are explained by various reasons (natural conditions, the capacity and technical equipment of the enterprise, the volume of its production, the degree of specialization and cooperation, differences in the forms of organization of production and labor, etc.). However, in a number of cases there are sharp differences in the level of costs of the same type of products which are a result of poor work by enterprises and can be greatly reduced.

Of great importance in finding the causes of differences in costs is the method of comparative analysis. Though the possibilities of its application are limited, because in many cases the conditions of the work of the enterprises are not similar, this analysis makes it possible to find additional reserves, to find the source of economies which otherwise it would be difficult to reveal. Unfortunately, the method of comparative analysis has not yet found a proper acknowledgement and is used extremely rarely, chiefly when it is necessary to find some illustrations concerning reserves for lowering costs. Even in most textbooks of analysis of the economic activity of enterprises and of industrial statistics, proper attention is not given to this method. For example, in the textbook "Analysis of the Economic Activity of Enterprises" (State Publishing House, 1955), in a section devoted to the analysis of the economic activity of industrial enterprises, this method is not even mentioned. In the "Manual of Industrial Statistics" by D. V. Savinsky (State Statistical Publishing House, 1954), as well as in the work of I. Poklad "Economic Analysis of the Production and Financial Activity of Industrial Enterprises" (State Financial Publishing House, 1956), and in the textbook "Economics of Socialist Industry" (State Political Publishing House, 1957), though the importance of the comparative analysis of the activities of similar enterprises is noted, the methods of comparison are not shown.

It must be pointed out that the method of comparative analysis is widely applied in the USA. In the report of the British-American Council on Labor Productivity it is shown that, in all cases when it is possible, a comparison is made of the costs of production of various industrial enterprises.

It is desirable that the organs of the CSA of the USSR prepare, by branches of industry, lists of enterprises for which comparisons of cost accounting per unit of the same product would be made obligatory for trusts, economic councils, ministries, as well as for the organs of the State Planning Commission and the CSA.

The data for 1956 given below concerning the cost of one ton of cast iron for steel manufacture in two metallurgical plants in the south show how great may be the importance of such analysis.

The Zaporozhye Steel and Makeyevka plants have blast furnaces of approximately the same capacity. The total capacity of blast furnaces of Zaporozhye Steel is 30 per cent larger than the capacity of the Makeyevka blast furnaces. Both plants use Krivoi Rog iron ore. The deviations of the average contents of iron in the ore are insignificant and the average contents of iron in the sinter is the same. The cost per ton of cast iron as planned at both plants is the same. However the actual cost of a ton of iron at the Makeyevka plant in 1956 was higher by 10.11 rubles than at Zaporozhye Steel. While at Zaporozhye Steel the actual cost was 2.84 rubles lower than the planned one at the Makeyevka plant it was 7.80 rubles above the planned cost.

Where does the cause of difference lie in the cost of metal at these plants? At the Makeyevka plant expenditures on raw materials and fuel as well as expenditures on casting were considerably higher than at Zaporozhye Steel. The Makeyevka plant spent, per ton of iron, almost three times more iron ore, because of lower contents of sinter in the furnace charge. This required more fuel. And though the cost per ton of coke was lower here than at Zaporozhye Steel, total expenditures for fuel were considerably higher. Larger expenditure on reduction at the Makeyevka plant was the result of poorer use of blast furnaces and also of a larger number of workers per blast furnace. Though, as compared with 1950, the number of workers serving each blast furnace at the Makeyevka plant was reduced by 28 men, still in 1957 a blast furnace there was served by 100 men, while at Zaporozhye Steel only 91 men were needed.

The comparison of the cost of iron at these two plants shows that not only the Makeyevka plant but also Zaporozhye Steel has large reserves for lowering costs. At the Makeyevka plant the losses from grinding are 30 per cent lower than at Zaporozhye

	Zaporozhye Steel Plant			Makeyevka plant			Cost of iron at Makeyevka as compared with Zaporozhye Steel.	
	Quantity in t.	Price per unit (rubles)	Cost (rubles)	Quantity in t.	Price per unit (rubles)	Cost (rubles)	Rubles	%
Raw and basic materials	2.071	—	105.59	2.096	—	110.80	+ 5.21	104.9
Including:								
Iron ore	.198	32.97	6.54	.588	34.91	20.52	+13.98	313.7
Sinter	1.739	51.05	88.74	1.388	58.72	81.52	- 7.22	91.9
Fluxes	0.383	—	10.33	0.538	—	12.10	+ 1.77	117.1
Fuel (in terms of theoretical units)	0.777	239.08	185.71	0.892	210.76	188.08	+ 2.37	101.3
Including coke (in terms of dry coke)	0.812	216.69	179.93	0.891	203.40	181.26	+ 5.33	103.0
Losses from grinding	(0.075)	129.96	9.78	(0.086)	79.48	6.82	- 2.96	69.7
Losses from rejections	0.071	—	0.63	1.096	—	0.77	+ 0.14	122.2
Expenses on casting	—	—	39.49	—	—	44.08	+ 4.59	111.6
Including:								
Power (in kwh.)	5.5	0.07	0.38	4.2	0.10	0.44	+ 0.06	115.8
Blowing (in thousands of cub. mt.)	2.701	4.70	12.70	3.530	3.89	13.74	+ 1.04	108.2
Plant overhead expenses	—	—	2.89	—	—	2.87	- 0.02	99.4
By-products	—	—	−20.60	—	—	24.27	+ 3.67	117.8
Losses of gases (in thousands of cub. mt.)	0.254	—	—	0.230	—	—	—	—
Cost at the plant (minus by-products)	—	—	322.78	—	—	332.89	+10.11	103.1
Planned cost	—	—	326.62	—	—	325.00	- 0.62	99.8
Data for reference								
Coefficient of exploitation of useful volume of blast furnaces	0.8	—	—	0.84	—	—	—	—
Average contents of iron in the ore	55.1	—	—	52.5	—	—	—	—
Average contents of iron in sinter	47.6	—	—	47.7	—	—	—	—

Steel. Also, at that plant by-products are better used. While the Makeyevka plant supplied 2,300 cubic mt. of blast-furnace gas per ton of iron, Zaporozhye Steel supplied only 1,900 cub. mt. Also, the losses of gas at Zaporozhye Steel were higher than at the Makeyevka plant, though even the latter exceeded the standard. At Zaporozhye Steel through better attention to these two items it is possible to lower the cost of iron per ton by 6.63 rubles.

A comparison of results of cost accounting for a number of plants and close examination of the work of such enterprises would permit us not only to determine the kind and the size of the reserves available, but also to outline the way they should be used.

Analysis of the general data of the reports concerning the costs of industrial products (though far from complete) shows that possible economies in visible reserves alone, as revealed in nonfulfillment of plans, exceed ten billion rubles.

The possibility of increasing the productivity of labor and, consequently, of cutting down expenditures for a number of items entering the cost of a unit of production is the first reserve for lowering costs. The increase in productivity of labor should proceed ahead of the increase in average wages, while the so-called overhead expenditures (a part of the sections' and general plant's expenditures) remain constant with the growth of production or grow slower than the volume of production. An especially important part in lowering the cost of production is played by the growth of productivity of labor in branches consuming relatively a great deal of labor (such as ore mining, coal mining and the timber industry), where the largest item in production expenditures is made up by wages.

The size of the reserves for the further increase of labor productivity may be seen from the fact that, along with the plants which successfully fulfill their plans, there are many plants which fail to do so. In 1956 and during the first half of 1957, industry as a whole overfulfilled the plan of labor productivity. However, many plants did not fulfill their plans in that respect. For example, in the first quarter of 1957, 10 per cent of the plants of the paper and wood-processing industries did not fulfill their plans for increasing labor productivity. Thirteen per cent of the plants of transport machine-building, 18 per cent of the chemical plants, 19 per cent of automobile and general machine-building plants failed to do so. In ferrous metallurgy, 38 per cent of the plants failed to fulfill their plans in that respect, while the percentage of such plants and enterprises in the coal and oil industries was correspondingly 44 and 51. Ministries of those industries failed to fulfill their plans for lowering costs.

Frequently the productivity of labor and the part of wages in the cost of production of plants functioning under approximately similar conditions are quite different, which also indicates the existence of substantial reserves. As an illustration we shall give below data for several power stations of Mosenergo for 1956.

Power stations	Productivity of labor (thousands of kwh. per worker)	Wages with charges, as part of the cost of one kwh. (in kopeks per kwh.)
Shchekinsk	2,344	0.25
Stalinsk	1,857	0.39
Cherepets	1,649	0.42
Kashirsk	1,176	0.50
Shatursk	1,089	0.63

From this table it is seen that both indexes are in complete agreement: the higher the productivity of labor, the lower the part of wages in the cost of one kwh. The basic cause of the high cost in a number of power stations is too large a number of servicing personnel.

An analysis of data characterizing the need of labor in the production of this or that commodity would also reveal possibilities for lowering costs, and in this way, of correspondingly reducing prices of products.

The existence of large inner reserves in the plants themselves may be seen from the fact that the amount of labor used in production per unit of products in a number of plants is still very large and is being lowered too slowly. The designers of the Moscow Automobile Plant fixed the number of standard hours for production of a car, ZIS-150, at 178.4. This car has been in production since 1947, and only in 1956 did it take 174.6 standard-hours to produce it, while in 1955, the figure was higher than the one established by the designers. The standards established by the designers for other types of cars at the same plant are being reached very slowly. A similar situation is observed at the Gorky and Minsk plants and in the Moscow plant producing cars with low gas consumption.

The analysis of the use of workers' time inevitably brings us to the conclusion that there is a great waste of labor. The loss of workers' time in connection with idleness of machines, nonappearance of workers with or without permission of the management of the plant in recent years not only did not diminish, but even increased. Now such losses of workers' time are higher, for example, than they were in 1950. Such losses per worker in industry in 1950 amounted to 2.8 days and in 1956 to 3.1 days. This means that in 1956 annual labor of more than 157,000 workers was lost; this includes losses from unauthorized absences of 25,000 man-years. In fact, losses of workers' time are considerably larger, because idleness of machines, etc., of less than 15 minutes duration is not reported; frequently longer stoppages are also not reported. The data of those who time the operations and the films of the work taken in a number of plants show that between reported losses and actual losses, as a rule, there is a great disparity.

Frequently the plants violate the ratio, established in the plan, between the growth of productivity of labor and the growth of wages, with the result that the wage funds are overspent and the products became more expensive than they should be. For example, in industrial enterprises in January-September, 1957, the productivity of labor increased by 6.5 per cent and average wages — by 6.7 per cent. In connection with violation of the planned ratios, the wage funds were overspent by several billion rubles. Though for industrial plants now under the supervision of the economic councils, beginning with August, 1957, the ratio between the growth of productivity of labor and average wages began to improve, still it remains unsatisfactory. In a number of plants of the coal, lumber, textile, apparel, meat, and sugar industries, especially in the plants of the Ukrainian and Kazakh Republics, the growth of the average wages was considerably ahead of the growth of labor productivity.

The numerous standards of output applied at the plants, not only experimentally and statistically but also technically justified are, as a rule, considerably overfulfilled, though the plans of production and the growth of labor productivity in many cases are not carried out; this shows that expenditure of labor per unit of production was overestimated. For example, in April, 1957, workers of the ferrous industry, who are paid by the piece, exceeded their standards by 39 per cent. For the non-ferrous industry the percentage was 41, for the chemical industry — 50, for the power industry — 97, for machine tool and instrument production, machine building, machine building of construction and road machinery — more than 100 per cent. Such a level of overfulfilling standards is the result, not of the efforts by the best workers, but of the standards being too low. It is noteworthy that when standards of piece production are re-examined and raised, the general level of productivity of labor in the plants is usually raised, which could not be just the result of carrying out organizational-technical measures, connected with the introduction of such standards: of great influence is the simple raising of standards, stimulating the growth of productivity.

After re-examination of the organizational-technical standards was carried out in 1956 in a number of machine building plants, the productivity of labor from June, 1956, to April, 1957, increased. At the Kolomna Diesel Locomotives Plant and at the Compressor Plant, it increased by 14.2 per cent; at the Progress Plant by 17.9 per cent; in the First State Watch Factory by 18.2 per cent. The percentage of overfulfillment of standards became substantially lower.

Comrade N. S. Khrushchev, in his report to the Seventh Session of the Supreme Soviet of the USSR, pointed out that hundreds of thousands of people in industry are busy with technical control. This is first of all the result of a low degree of mechanization of controlling operations. The expenditure on maintenance of the control apparatus brings increases in the cost of production and lowers the average indexes of labor productivity in industry. In machine building alone there are about 225,000 men (more than 15 per cent of the total basic workers occupied in production) occupied in technical control. In a number of cases, the amount of labor expended on control work is larger than the amount of labor needed for the production of a commodity. For example, in the production of engine blocks at one airplane motor plant, drilling and finishing drilling of 48 holes takes eight minutes, while control of these operations takes 26 minutes; abrasion of the face of the pump head takes less than one minute, while control takes about two minutes; threading in making of the gear case of the engine takes 92 minutes, while control of the same operation takes 183 minutes.

Mechanization of the control work, transfer of a number of control functions, especially in the intermediary operations, to the workers themselves, would permit cutting down the personnel in the control apparatus, raising the productivity of labor and lowering the costs of production.

The existence of a whole army of men watching industrial standards is lowering the average indexes of labor productivity and increasing the costs of production. In machine building, for example, on the average there is one man watching standards for ten workers. This is the result of the multiplicity of technical standards of labor applied at the plants. In one machine-building plant there are 720,000 standards; in the Moscow Polishing Machines Plant there are more than 520,000 standards; at Leningrad shipbuilding more than 200,000 standards. Each of these standards should be calculated and periodically re-examined. All this demands a colossal amount of labor. It is enough to say that the inspector of one standard makes 30 to 40 standard calculations during the day.

The multiplicity of standards brings an increase in the volume of calculating work, and, therefore, in the number of the personnel occupied with these calculations. For each standard, the worker gets an order, or a corresponding line is filled in an order which has many lines, or in a report about the shift. At the end of the month, for all such orders, calculations have to be made, because without them, wages or the degree of fulfillment of standards by the worker cannot be calculated. Every month at the plants tens and hundreds of thousands of orders and perforated cards are prepared and processed. At the First State Ball Bearing Plant on the average 200,000 orders are prepared; at the First Watch Factory — 150,000 perforated cards; at the Nevsky Machine Building Plant, about 120,000 perforated cards a month. Processing one order cost 15 to 20 kopeks or even more. Sometimes the expenses of preparing and processing of orders reach colossal dimensions. At the Nevsky Machine Building Plant, for cutter Litoshko, who earned 480 rubles a month, the machine calculating center prepared 782 documents including 443 for operations which each cost from one to 14 kopeks. Processing these documents alone at the machine calculating center cost 110 rubles.

In the field of technical standards, the most important task now is cutting down the number of existing standards through their consolidation. In 1956, when the standards of labor and wages were put in order at 14 machine-building plants, the work standards were re-examined. However, at many plants the number of standards applied was cut down too little. At the First State Ball Bearing Plant the number of standards was reduced from 100,000 to 91,000. At the Nevsky Machine Building Plant they were reduced from 207,000 to 179,000; at the Progress Plant, from 121,000 to 113,000; and at the Moscow Polishing Machines Plant their number was even increased by 23,000.

Bringing order into the organization of technical standards will make it possible to increase the productivity of social labor and to lower costs of production.

Large reserves for lowering costs of production are connected with cutting down management personnel, the expenses of which make about three-fourths of the whole sum of administrative-management expenditures. Though this apparatus was cut down repeatedly, still it remains too big. We must have in view that, beside the official administrative-management personnel, in a number of cases there is a substantial number of engineers and technicians who are shown in the reports as occupied in production, though they should have been shown in management; in this way the true ratio of various categories of workers is distorted.

A check made by the financial organs showed that in the plants of heavy industry more than 50 per cent of all sections of the plants have less than one hundred workers. There are sections which have only 10-25 workers. In most machine-building plants there are 7-15 workers per master. At many plants the structure of management is too complex. For example, at the Moscow plant of wood finishing machines, where 640 workers are employed, the management has 15 subdivisions in which 209 persons are occupied. At the Ordzhonikidze Podolsk plant, the management has 23 departments which, in turn, consist of a number of subdivisions. For example, in the department of the Chief of Technology there are ten bureaus; in the department of the Chief Mechanic, two bureaus and six laboratories; in the production-dispatchers' department, four bureaus. Consolidation of departments of the plant management, enlargement of sections and — in a number of plants —change to a system of work without sections — all this would make our system of management simpler and would lower the costs of production. In 1956, 56 plants of the Ministry of the Automobile Industry of the USSR, as a result of rationalization of the management system, cut down the number of their departments by 17 per cent, of sections, by 23 per cent. Nineteen plants abolished the section system. All this made it possible to cut down the management personnel by 3,695 workers, of whom 2,000 were transferred directly to the production lines. As a result of this, the overhead expenditures were reduced by more than 33 million rubles, and this contributed to the lowering of production costs.

The part of accounting personnel in our administrative-management apparatus is very significant. In spite of its systematic reduction, the apparatus of accounting workers still remains too large. This is the result of a number of factors: poor organization of the labor and wage system (multiplicity of labor standards, unnecessary application of the piece wage system in some cases, a system of numerous bonuses); application of a number of regulations which have the force of law (how to compute average wages, payments for the night work, payments for rejected products, calculation of taxes, etc.); a very small degree of mechanization of accounting work. Only simplification of the system of reports and records and a sharp increase in mechanization of accounting work can bring a substantial reduction of the number of accounting personnel and the costs of its maintenance.

The existence of a large administrative-management apparatus not only contributes to rising costs but also takes the production workers away from their direct duties to the preparation of answers to various inquiries, reports, records, etc. A sample investigation shows, for example, that the director of the Ivanov Factory Krasnaya Talka sometimes is occupied whole days just with signing documents (there were days when he had to sign more than 400 documents).

Bringing management closer to the enterprises in connection with the reconstruction of the system of industrial management opened broad perspectives for lowering costs and simplifying the apparatus of the plants and of the higher organs. For strengthening control over the state of the administrative-management apparatus and finding reserves for its reduction it would be a good idea to start calculating productivity of labor not per worker occupied in direct production, but for the whole personnel, including engineers and technicians and other categories of white collar workers. Comparison of such indexes for a number of similar plants would make it possible to find excessive personnel in the management apparatus and take measures for its reduction.

Another important reserve for cost reduction is economy of materials — of raw and other materials, electric power, etc. This source is of special importance in those branches which consume relatively large quantities of the above, such as machine building, metallurgy, cotton textiles, the sugar industry, etc. The economy of material values not only would secure the lowering of production costs, but also would permit production of additional products out of the same amount of materials, which is the same thing as increasing the scale of production.

As a result of improvement in the technique and technology of production, improvement of its organization and the struggle of the laboring masses for a regime of economy, we achieved certain success in economizing labor. For example, the amount of furnace charge, including sinter, for production of one ton of cast iron, was cut down from 2.092 t. in 1940 to 1,900 t. in 1956, and coke during the same period from 1,193 t. to .964 t. The amount of the furnace charge for production of one ton of open-hearth steel during the same period was cut from 1.163 t. to 1,115 t., of coal in terms of theoretical fuel — from .263 t. to .193 t. The part of coal in terms of theoretical fuel in the production of one kwh. of electric energy in regional power stations of the Ministry of Power Stations of the USSR was lowered from .624 t. in 1937 to .463 t. in 1956. If consumption of fuel by the regional power stations remained at the level of 1937, they would consume almost 26 million tons more than they actually did. During the first half of 1957, as compared with the same period of 1956, the consumption of fuel decreased further by 3.2 per cent. Consumption of metal for production of machines was cut down, especially in the post-war period. Nevertheless there remain in industry great reserves for the further possible economy of material values.

We have in view the possibility of lowering the established standards for the use of materials per unit of product. In industry, there are still many plants which spend more than indicated by the established standards. In such plants, not only are the production costs higher, but profits are also cut down, and the possibilities of production are reduced, because the production plans are tied up with the supply plans. Use of material values above the established limits creates difficulties, and in a number of cases, especially in the case of metals in short supply, limits the possibilities of carrying out the plan. For example, in 1956 the plants of the Ministry of Ferrous Metallurgy of the USSR consumed, for the production of one ton of open-hearth steel, .193 tons of fuel instead of the planned .182 tons; for production of one ton of rolled steel, .158 tons instead of .156 tons of fuel. As a result, more than 400,000 tons of fuel were spent above the plan. The metallurgical plants consumed almost fully all the fuel saved by the power stations of the Ministry of Power Stations of the USSR. The brick kilns of the Ministry of Building Materials of the USSR overspent more than 100,000 tons of fuel.

That there are reserves for the economy of material values may be seen from the fact that expenditures of raw materials, other materials, and fuel for the production of the same kind of product in various plants is far from being equal. Frequently these differences are so great that they cannot be justified by the specific conditions of production. For example, in 1956 the lowest expenditure of electric power — 3.4 kwh. per ton of carbon open-hearth steel — was made at the Nizhnetagilsk Plant, while the highest — 16.4 kwh. — at the Seversk Metallurgical Plant of the Ministry of Ferrous Metallurgy. On the national average, .193 tons of fuel were needed for production of one ton of steel; the smallest amount spent was at the Magnitogorsk Metallurgical Combinate — .144 tons. The Ashinsk plant needed .360 tons, Nizhnesergievsk — .378, and Verkhnesaldinsk — .455 tons.

The average national expenditure of ore for production of one ton of cast iron in 1956 was 1.842 tons (including sinter). The Magnitogorsk metallurgical combinate spent 1.764 tons. The average for the Makeyevka plant was 1.976 tons. The average amount of coke needed for production of one ton of metal was .811 tons, while Magnitogorsk used only .618 tons — the smallest amount — and the Verkhnesinyachinsky Plant used 1.205 tons — the highest figure.

There are differences in consumption of fuel even among the power stations, the production conditions of which are approximately similar. In 1956 the Cherepovets power station of the Mosenergo spent, for generation of 1 kwh., .370 tons of fuel in terms of theoretical fuel, Stalinsk — .406 tons., Shchekinsk — .428 tons., Kashira — .474 tons., Shatura — .535 tons.

In a number of cases the established standards for the expenditure of raw and other materials and semi-finished products are excessively high. Their re-examination could stimulate the economizing of material values and help to lower the cost of production. In our oil industry, for the exploitation core, drive pipes are used with a diameter of 6 3/8 inches and with wall thickness of 7mm., while in the USA the oil industry is using pipes with a diameter of 5 1/2 inches and with a wall thickness of 6mm. The use of such pipes here would cut down the expenditure of metal by 25 per cent.

In addition, the weight of many machines and mechanisms is too great. For example, the Stalmost plant produces five-ton cranes with two platforms for service, which weigh from .84 to 3.157 tons, while one platform is sufficient. The working platforms of the cranes are made of corrugated iron 5 mm. thick, though 3 mm. would be sufficient. The weight of the beam of the crane is now 5.345 tons., larger than in the prewar period. Lowering the weight of the travelling (bridge) crane by only 3.5 tons (which is quite possible) would save annually up to 10,000 tons of metal and would considerably lower costs.

There are great possibilities in cutting down rejects and wastes in production. We lose annually up to four million tons of metal as shavings. In machine building, for example, only 75-80 per cent of the rolled steel used is used productively, and frequently even less than that. At the Minsk tractor plant, in preparing some details, the rejects and wastes reach 70-80 per cent, though the standards of metal consumption are not exceeded. This means, first of all, that allowances were set too high. In some cases large wastes are a result of delivery by metallurgical plants of rolled metals not of the required profiles or, frequently, with excessive allowances. At one machine-building plant alone the loss of metal, as a result of producing rolled steel with excessive allowances, exceeded the established loss standard by seven per cent, and this resulted in a loss of 80,000 rubles. According to calculations of Academician N. Gudtsov, the production of metal with minus allowances, or even without plus allowances, would save as much rolled steel as is produced by one plant of average size. Excessive wastage not only increases the cost of an article by increasing expenditure of materials, but results in an overexpenditure of wages by increasing the expenditure of labor per unit of production.

Not infrequently valuable waste products which could be used in production are lost. At the plants producing sulphuric acid about a million tons of pyrate cinders annually are dumped as wastes, and because of that, large amounts of iron, copper, gold and silver are lost. Accumulation of pyrate cinders makes the work of the plants more difficult. Substantial sums are spent on their removal; yet they could be used for production in blast furnaces and a number of metals could be extracted from them. Capital investments necessary for the utilization of these cinders would lower the cost of sulphuric acid and pig iron in the metallurgical plants, because the materials lost in these wastes cost much more than the iron ore.

It must be pointed out that some of the bonus systems in fact are preventing the economy of material values and lowering of costs. For example, bonuses are paid for carrying out a plan of delivery of scrap metals; as a result the plants which do not fulfill their plans in that respect sometimes deliver as scrap iron not only metal tailings, which could be used in production, but even metal satisfying contract conditions. The situation is no better in the field of waste paper.

Finally, there are large masses of raw and other materials and fuel which sometimes are kept out of production in the form of excessive reserves, over and above standard reserves. By the end of 1956 the industrial plants amassed almost 17 billion rubles' worth of such reserves. Not infrequently some plants accumulate materials in which others experience an acute shortage. Waste of means of production in reserves increases the need for circulating funds, lowers effectiveness of the use of material values, and in a number of cases, leads to direct losses and an increase in the cost of products. The reason is that, as a result of long and often poor storing of materials, the plants experience losses of raw and other materials and fuel worth tens of millions rubles.

A substantial reduction of the costs of production may be obtained through better use of the basic funds which would result in an increased output of the product and would lower costs by lowering the part of amortization and overhead expenditures. This reserve for lowering costs is of special importance for those branches where the part of amortization in the total costs of production is large (for example, production of power and production of oil).

The success of our industry in the use of basic funds is very great. As a rule, they are used better than in most capitalist countries, including the United States. For example, the coefficient of exploitation of the useful volume of blast furnaces in ferrous metallurgy of the USSR in 1932 was 1.75; in 1956 it was 0.78. The average daily production of steel per square meter of open-hearth sole increased from 2.29 tons in 1933 to 6.8 tons in 1956, and it increased further by three per cent in 1957. Just through better use of the basic funds as compared with 1932-1933, in 1956 about 20 million tons of pig iron and more than 30 million tons of steel were produced. The number of hours of use of the average annual installed capacity of regional power stations increased from 2,270 in 1913 to 5,766 in 1956, which factor alone was responsible for the growth of electric power production by 2.5 times. The coefficient of use of cement rotary furnaces rose from 0.51 in 1940 to 0.85 in 1955. However, the possibilities of better exploitation of productive capacity — first of all through cutting down idleness of machines — are far from exhausted.

That we have reserves for better use of basic funds may be seen, first of all, from the fact that many enterprises do not fulfill their plans. In 1956, and during the first half of 1957, the enterprises of ferrous metallurgy of the USSR did not fulfill the plan of exploitation of the blast furnaces and open hearths. The enterprises of the oil industry have not fulfilled their plans for the use of their drilling equipment. A number of enterprises of the lumber industry used their machines and mechanisms unsatisfactorily.

The same equipment at different enterprises, and even in the same enterprise, is used to a different degree. In many cases, the difference in the degree of use of the productive capacity is brought about not by differences in technique and production technology, but by organizational-technical shortcomings. For example, the average coefficient of exploitation of the useful volume of blast furnaces at the metallurgical plants in the Ministry of Ferrous Metallurgy in 1956 was .78. At the Magnitogorsk metallurgical combinate it was 0.63; at the Alapaevsk plant—0.86; at the Nizhnesaldinsk plant — 0.98. In the USSR, on the average, each square meter of the sole of open hearths in 1956 produced 6.8 tons of steel; in the best plants — the Magnitogorsk and Kuznetsk metallurgical combinates — about 8.8 tons; at Zaporozhye Steel — 8.66 tons; at the Nizhnetagilsk plant — 8.65 tons; at the Kazakh plant 7.64 tons; at the Ashinsk plant, only 4.09 tons. This does not mean that all metallurgical plants can reach the level of use of blast furnaces and open hearths reached at the best plants; but, without doubt, the differences between the plants can be reduced.

One of the important causes of unsatisfactory use of capacity is the fact that there are long stoppages between the shifts in the machine-building plants which, as a rule, work in two shifts; yet their equipment is functioning not more than 1 1/2 shifts. In 1956, in the plants of the automobile industry, the coefficient of shifts was only 1.55. The use of capacity of electric power stations in recent years not only did not improve, it actually became worse. In 1956, idleness of drilling equipment occupied in drilling oil wells also was not reduced.

The idle time of the open hearth furnaces in 1956 in ferrous metal plants amounted to 11.4 per cent of the calendar time. At the Dneprovsk and Chelyabinsk plants it was 14.2 per cent; at Kuvshinsk — 15.6 per cent; at Verkhnesaldinsk — 17.5 per cent; while at the Magnitogorsk combinate, only 7.8 per cent. If all metallurgical plants would reduce the idle time of the furnaces to the level of the Magnitogorsk Combinate, the country could obtain an additional 1.5 million tons of metal a year.

An analysis of the results of the work of many enterprises and of a number of branches of industry shows that our industry, in spite of the systematic reduction of production costs and great successes reached in that respect, has great reserves for lowering costs even further. It must be pointed out that the use of these reserves is frequently retarded by insufficient material interestedness of the workers in lowering such costs. The experience with the bonus system for the purpose of lowering costs, which was successfully applied at the Moscow and Gorky automobile plants and the Stalingrad tractor plant in 1953-1954, shows that, with the application of that bonus system, the economy achieved by reducing costs was considerably increased and losses from rejections were cut down. Instead of studying this experience and applying it at other plants, the financial organs did not permit its use even at the three plants where it had justified itself. As a result the savings above the planned ones at these plants were reduced and losses from rejections increased. Yet the Vladimir Ilyich plant in Moscow in 1957 was permitted to apply a bonus system to the managers, engineer-technical personnel and white collar workers for carrying out and overfulfilling the plan of lowering costs and the plan of accumulations, provided the plan of production of commodities was fulfilled. For the fulfillment of the plan of lowering costs, it is permitted to pay out from 10 to 25 per cent of their monthly wages, and for each per cent of overfulfillment — from two to seven per cent.

In order to discover and use reserves for lowering costs, it is necessary to improve the analysis of reports and to change the "Basic Rules of Planning, Quantitative Control and Cost Accounting for Industrial Production" approved in 1955 so as to simplify them and to increase their effectiveness. We must work out rules concerning the bonus system for the fufillment and overfulfillment of the plan for lowering costs. It is very important to provide material incentives for lowering costs of production for the workers of the plants and the organizations standing over them — trusts, economic councils, etc. This will make it possible to obtain higher tempos in lowering the costs of industrial production.

A. Pakhomov:

Problems of Lowering Production Costs in Machine-Tractor Stations*

The 20th Congress of the Communist Party of the Soviet Union, in its directives concerning the Sixth Five-Year Plan for the development of the USSR economy, pointed out the necessity of improving techniques in MTS, increasing the daily productivity of tractors and grain combines by not less than 30 to 35 per cent, lowering the expenses of tractor work by about 16 per cent and substantially reducing state outlays per centner of grain production received as payment in kind for the work of MTS.

Of great influence upon the level of MTS' outlays per centner received is the mutual fulfillment of obligations under contracts between MTS and collective farms.

Many MTS are considerably overfulfilling the plan for light field work, which is advantageous for them in showing their work in terms of plowed land and fuel economy, but it is done at the expense of more difficult work. In 1956 the MTS of the country did not fulfill the plan of work for inter-row cultivation by 28 per cent, silaging of fodder by 32 per cent, grass mowing by seven per cent, etc. At the same time the MTS overfulfilled the contract obligation plan for harrowing in 1955 by 50 per cent, in 1956 — by 27 per cent. Yet in harrowing and other light work MTS are not getting as much grain, etc., as for other work. Overfulfillment of the plan of this work at the expense of other required by the plan, brings non-fulfillment of the plan of payments in kind. As a result of nonfulfillment of their obligations in respect to work in collective farms, the MTS in 1956 received less in kind than planned from collective farms, as follows: potatoes — 23 per cent, vegetables — 24 per cent, meat — 21 per cent, etc. As a result, planned standards of expenses per centner of products in kind were exceeded: for potatoes by eight per cent, for flax, by 15 per cent, animal products, by 14 per cent, etc. Especially great overexpenditures per center of payments in kind, as compared with the plan, took place when only centners delivered by collective farms to state warehouses are considered. This overexpenditure is also a result of nonfulfillment of obligations by a number of collective farms in respect to payments in kind to the state.

According to existing rules, MTS calculate payments in kind for work done at fixed rates, independently of yields obtained. The only exception is the work of combines and threshing, for which the payment in kind is made as a per cent of grain obtained from threshing. Thus, the higher the yield, the more, under other equal conditions, MTS would receive in payments in kind for the work of combines and for threshing. In the final accounting this tends to lower expenses per centner of payments in kind.

Analysis of the work of MTS for 1956 shows that with increased yields of grains the level of expenses per centner received also decreases, as the following data show:

Groups of MTS by yields (centners per ha.)	Expenses per centner of grain received in kind (in rubles)		
	Altai region	Krasnodar region	Kalinin region
up to 5	—	—	209.76
5 to 7	61.9	—	174.67
7 to 10	59.04	—	139.79
10 to 15	52.75	34.10	—
15 to 20	45.73	27.77	—
Above 20	—	24.98	—
Number of MTS included in the study	52	50	44

In the group of MTS of the Altai region, where the yields of the served collective farms are from 15 to 20 centner per ha., the expenses per centner received by the MTS are 26 per cent lower than in the groups of MTS serving collective farms with yields below seven centners per ha. In the Krasnodar region, in the group of MTS with highest yields, expenses per centner are 27 per cent lower, and in MTS of the Kalinin region — 33 per cent lower than in MTS serving collective farms with low yields.

This means that the most important source for lowering costs per centner received is the everyday struggle of MTS and collective farms for increasing yields. This presupposes mutually strict observance of obligations undertaken in contracts signed by MTS and collective farms.

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In recent years a substantial modernization of the machine-tractor fleet of the MTS with new, productive and efficient tractors took place. Efficient diesel tractors increased from four per cent of the total in 1950 to 66 per cent in 1956. Thus in MTS favorable conditions for considerably lowering the expenses of tractor work have been created. One of the measures in the struggle for lowering expenses of MTS is proper planning of the expenses of tractor work, aiming at highly efficient use of machines as well as maintaining a regime of economy.

In the decision of the CC of the CPSU and of the Council of Ministers of the USSR "Concerning changes in the practice of planning in agriculture" development of the initiative of MTS workers in planning production in agriculture is foreseen. According to contracts with collective farms, directors of the MTS were authorized to approve types of mechanized work within the limits of the general volume of tractor work, and to change the volume of individual types of tractor work following the demand by, or in agreement with, collective farms. The Ministry of Agriculture of the USSR is under obligation to fix goals of the union republics for the expenses of the state per centner of agricultural production received as payment for the work of the MTS (for more important kinds of products), and to bring these goals to the attention of the MTS through local agricultural organs.

Proper planning of expenses for tractor work is of great importance. For example, higher than necessary standards of fuel expenditure require additional funds and an increase in costs of plowing per ha. of plowed land, while lower than necessary standards of fuel expenditures cause overexpenditure of fuel. The tractor driver is not at fault. In order to avoid fines, he violates the plan of tilling the soil in accordance with agricultural techniques.

Standards of fuel expenditure established for MTS in kg. per ha. of plowed land are higher than they should be. Standards of fuel consumption for carrying out individual and brigade tasks are approved within the limits of these standards by directors of MTS.

Standards of fuel expenditures are very complex. Conditions of tractor work change sharply with changes of weather, presence of weeds, and the state of corn at the time of the harvest. In addition the size of plots, terrain, and resistance of soils, etc., are important. Of great importance for fuel consumption per ha. of plowed land is also the organization of tractor work and the degree of use of tractors. Nevertheless it is evident that with the introduction of new, more economical machines fuel consumption per unit of area must become lower when the complex of work remains the same. However, this circumstance is not always taken into consideration at the time of planning the standards of fuel consumption.

That planned standards are higher than actual fuel consumption is especially clear from the example of MTS in the Krasnodar region. For example, for the tractor CHTZ-C-80, the actual fuel consumption per ha. of plowed land in 1954 was 8.5 kg.; in 1955 8.9 kg.; for 1956 the planned standard was 9.3 kg. and actual consumption was 9.2 kg. For the tractor KDP-35 actual fuel consumption in 1954 and 1955 was 7.8 and 7.3 kg. respectively, and the planned standard for 1956 — 8 kg. For tractors CTZ-NATI actual fuel consumption per ha. of plowed land in 1954 and 1955 was 14.3 kg. and 14.4 kg., while the planned standard for 1956 was fixed at 14.7 kg. In some MTS, planned standards of fuel consumption when driving without load are higher than they should be. For example, in the Krasnokholmsk MTS in 1955 actual fuel consumption when driving without load cost 8,400 rubles, when the planned figure was 11,500 rubles. At the same MTS in 1956 the fuel expenditure of tractors working without load was established at 10,700 rubles, that is, higher by 28 per cent than in 1955, though the number of tractors remained the same. In fact, the Krasnokholmsk MTS spend 6,000 rubles on fuel for tractors driving without load in 1956, that is, a "saving" of more than 40 per cent.

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*For discussion purposes.

Thus, in planning fuel consumption it is necessary to consider the change in the structure of the tractor fleet caused by obtaining new, more economical diesel tractors and to establish more realistic standards of fuel consumption.

The level of costs is considerably influenced also by the way expenditures for repair of the machine-tractor fleet are planned.

The period between repairs for tractors and agricultural machinery is different, depending upon the soil and climatic conditions in various zones of the country, the size of the lots plowed, local terrain, length of field work, etc. In accordance with the limits of the costs for repair of various types of tractors, standards of allowances for capital and current repairs as well as for technical maintenance (for tractors — per ha. of plowed land, for combines — per ha. of harvested area) are established. As the work of tractors and combines is carried out according to calculations made and presented by MTS on the basis of standard allowances and the volume of work done, allowance sums which are due the MTS for repair and maintenance of tractors and agricultural machines are transferred from the state budget to the MTS.

Actually the required period of work without repair for new tractors is the same as for old worn-out ones. As a result tractor drivers using new tractors overfulfill without difficulty the required period of work without repair and obtain large economies and bonuses, while tractor drivers working with old, worn-out tractors, even the best of them, do not fulfill these standards and are deprived of a chance to get a bonus; this deprives them of incentives to lower costs.

Below are data on the number of capital repairs performed on various types of tractors in MTS of the Altai, Voronezh, and Kalinin regions in 1954-1956:

Tractor types	Altai region		Voronezh region		Kalinin region	
	According to standard	Actually carried out	According to standard	Actually carried out	According to standard	Actually carried out
CHTZ-C-80	1,155	2,058	282	538	124	96
DT-54	9,093	6,834	1,889	2,133	2,546	3,384
KD and KDP-35	299	126	1,189	669	346	574
Belarus	564	67	309	39	505	76
STZ-NATI	4,457	8,188	1,382	1,931	438	841
SKHTZ	5,909	5,022	3,816	3,711	3,480	3,348
Universal	961	651	1,872	1,824	314	174

These data show great differences between the number of actually carried out tractor repairs and the number of required repairs. For example, in MTS of the Altai region Belarus tractors had nine times fewer capital repairs than expected by the standards. Tractors KDP-35 — three times less, tractors Universal and DT-54 — one and half times. In contrast, tractors CHTZ-C-80 and STZ-NATI had to undergo twice as many capital repairs as expected by the standards. As a result of poor planning there is a great difference between actual expenditures on tractor repairs and the repair appropriations transferred from the state budget to MTS. Below are given data for the same MTS and for the same years (in rubles):

Tractor types	Actual expenditures and budget appropriations for repair per ha. of plowed land					
	Altai region		Voronezh region		Kalinin region	
	Budget approp.	Actual expend.	Budget approp.	Actual expend.	Budget approp.	Actual expend.
CHTZ-C-80	5.13	7.36	4.57	6.16	9.31	7.48
DT-54	3.81	3.23	3.73	3.65	7.31	9.76
KD and KDP-35	7.31	4.56	7.14	3.88	16.11	21.90
Belarus	7.61	2.24	8.16	1.85	13.41	4.25
STZ-NATI	5.65	8.41	4.31	5.98	8.08	16.71
SKHTZ	6.79	6.72	6.18	5.71	10.81	13.06
Universal	7.29	4.46	6.56	5.56	10.91	7.57

These data show that for Belarus tractors in MTS of the Altai region, transfers from the budget per ha. of plowed land exceeded the actual expenditures for repair 3.4 times, while for STZ-NATI tractors, actual expenditures exceeded transfers 1.5 times. In the Voronezh region transfers per ha. of plowed land for Belarus tractors exceeded the actual expenditures for repair four times and in the Kalinin region — three times, while for STZ-NATI tractors actual expenditures for repair exceeded transfers almost twofold. As a result of this disparity between transfers and actual expenditures, the MTS which received new tractors gained considerably. They received from the state budget larger funds for repairs; but as the new tractors did not need repairs for quite a time, they had an artificial economy of expenditures for repairs. In contrast, MTS using old-type tractors spent more on repairs than they received from the state budget.

Thus, the standards establishing budget transfers for the repai of tractors of various types as well as the allowed periods between repairs need a careful re-examination. It is necessary to change these standards and periods between repairs in a way that will stimulate more careful treatment of tractors, combines and other agricultural machines, and more economical spending of funds for repairs and maintenance. We believe that one of the conditions of planning proper standards for repair expenditures and for the periods between repairs should be the establishment of different periods between repairs, depending upon the length of use of tractors and the amount of work done by them in MTS. At the same time it is necessary to change the order of checking expenditures for repair because the existing order brings a wron evaluation of MTS' work. An overwhelming portion of MTS carry out machine and tractor fleet repairs during the first and four quarters of the year. In view of this, if MTS overfulfill their plan of repairs in the current year, the annual report will show an overexpenditure on repairs and, in contrast, if they do not fulfill their plan of repairs, they will have an artificial economy on repairs for the current year.

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The most important means of lowering expenditures of MTS for tractor work is better use of the MTS machine and tractor fleet. The more rational their exploitation, the higher the labor productivity of tractor drivers and other tractor brigade workers the lower expenditures per ha. of tractor work.

The labor productivity of workers of MTS should be calculated on the basis of the final results of agricultural production, namely, upon the production of agricultural products in collective farm per unit of time spent by farm members and MTS workers. However, this would not exclude calculating such indexes of labor pro ductivity as measures carrying out the plan per shift and per sea son by MTS workers using machines.

As a rule, MTS which have a high degree of achievement per tractor per shift fulfill their contracts with collective farms, and carry out agricultural work quickly. This contributes significantly to raising yields and increasing the gross production of agricultural products. Such MTS receive more in payments in kind and have small expenditures per centner of products. For example, the Sovietsk MTS, which overfulfilled its seasonal plan of work per tractor by 11 per cent, showed the cost of one centner of grain obtained for its work as 26 per cent lower than the corresponding average figures for the MTS of the Krasnodar region. The Topchikhinsk MTS, Altai region, overfulfilled its plan of work by 12 per cent and its cost of tractor work is 14 per cent lower than the average index for the region, and expenditures per centner of grain collected — 22 per cent lower. In the Krasnokholmsk MTS the work done per tractor (in terms of 15 hp.) is 51 per cent higher than the average level or the Kalinin region MTS, the cost of tractor work is 31 per cent lower, and expenditures per centner of grain collected for their work from the collective farms is 43 per cent lower than he average for the region.

However in many MTS the technique used is still inadequate. Despite the large number of new, highly efficient tractors, there is substantial idleness of MTS fleets and a low level of tractor driver productivity. The average work per tractor (of 15 hp.) in the last three years remained on the same level.

The productivity of tractors is greatly influenced by the seasonal character of the use of the tractor fleet. They are used most intensively during the spring work of sowing and the summer-autumn harvesting period. The rest of the year the fleet is used little or not at all. 79 per cent of the annual volume of tractor work in the Altai region MTS is done during the period of sowing and harvesting (May, August, September, October) and the remaining 21 per cent — during the other eight months. In the Altai and other regions of western Siberia only six to seven per cent of the annual volume of tractor work was performed in June and July of 1955 and 1956.

The seasonal character of machine use by MTS is explained not only by the seasonal character of agricultural production but also by the fact that MTS themselves are not well prepared to carry out work in winter time. Also, the assortment of available machines is not suitable for non-seasonal work.

Large reserves for increasing the level of exploitation of MTS' machines can be available if idle time is cut down. Even in the best MTS a substantial amount of working time is spent in idleness of tractors during the period of field work, as may be seen from the following data covering six months of field work (from May to October inclusive, 1957):

	Talovsk MTS		Topchikhinsk MTS		First Kashikhinsk MTS	
	In abs. figures	%	In abs. figures	%	In abs. figures	%
Total number of tractor shifts	31,536	100	68,323	100	38,791	100
Including those spent actually in work	20,985	67	37,039	54	31,151	80
Idleness of tractor shifts	10,551	33	31,284	46	7,640	20
Causes:						
Technical maintenance	1,552	5	3,527	5	1,524	4
Tractors' technical trouble	750	2	7,373	11	1,207	3
Organizational causes (no work, no fuel, etc.)	8,249	26	20,384	30	4,909	13

These data show that forced idleness of tractors, connected with technical maintenance, is of small importance (four to five per cent of total idleness), while idleness from technical trouble and organizational causes makes up from 16 to 41 per cent of the total time. Elimination of such idleness would make possible a sharp increase in the volume of tractor work and lower cost of work per ha. of plowed land.

Of great importance for fuel economy is the increase in the use of diesel tractors; expenditure of diesel fuel per ha. of plowed land in 1956 amounted to 9.8 kg., while fuel for carburetor tractors was 14.6 kg. Thus, on each ha. of the plowed land work done by diesel tractors saved about three rubles. However, many MTS use diesel tractors poorly and their widespread idleness during the field work period and the seasonal character of work results in small achievements by these tractors, as the figures in the following column show.

	Work per season		Work per shift	
	Per tractor	Per tractor of 15HP	Per tractor	Per tractor of 15HP
Diesel tractors of all trademarks		546		3.0
Including:				
CHTZ-C-80	1,643	416	11.0	2.7
DT-54	1,450	605	7.8	3.1
KD-35	455	283	4.1	2.5
Carburetor tractors		465		3.6
Incl. STZ-NATI	981	486	6.5	3.1
STKHZ	388	388	3.8	3.8
Universal	397	595	3.4	5.0

As these data show, the work done per shift by 15 HP carburetor tractors is 20 per cent higher than for diesel tractors. This means that many MTS do not use the power of such tractors fully. As a result, tractor types (such as CHTZ-C-80, KD-45, KDP-35) in 1956 performed work of less than three ha. of plowed land per shift in terms of 15-hp. tractors.

Overexpenditures for repair of machine-tractor fleets are a result of: premature wearing out of tractors and agricultural machines and removing them before time for capital and current repairs; exceeding prescribed costs, and because of poor quality of repair, necessitating repeated repairs; unsatisfactory storing of machines in winter at MTS and tractor brigade storage sheds; excessive runs of tractors and machines from the brigades to MTS, etc.

One of the most important conditions for good preservation of tractors is timely maintenance and good storage conditions. However, in many MTS this important rule is violated. Tractors, combines and other agricultural machinery break down before their time, waste time undergoing repairs, and the cost of repairs becomes greater than the sums appropriated for them.

According to the data of the last three years many tractors, which, judging by the volume of work carried out on them, should have had only current repairs, were sent for capital repairs. This resulted in great overexpenditures of funds. For example, in the Altai region, during the last three years the number of tractors which had capital repairs was 5.6 per cent greater than permitted by regulations, and in the Kalinin region — ten per cent greater.

Expenditures for repairs of machines and tractor fleets consist of wages of workers, the cost of spare parts and repair materials, general production expenditures (fuel and lubricating materials, wages of the management of the repair shops, etc.), and payment for the repair of motors to the self-supporting [khozrashchet] repair shops and plants. In the best MTS, which have their own repair base, all their capital and current repair of machines, tractors, and combines is made in these shops; thus, there are no expenses of moving them to repair plants and making payments for repair of motors. The economy of wages in these MTS is obtained through better organization and standards of repair work. Here the workers do the work which corresponds to their training and experience, written orders for work are issued in time and there is proper control over the time and quality of work done. But in many MTS, standards are neglected, written orders are prepared for the sake of form frequently after work has been done, and this results in low labor productivity and lack of personal responsibility for repairs. One of the most important factors making for economy of funds for repairs in the best MTS is lowering the so-called general production expenses. Experience shows that the amount of such expenses depends upon the economic use of materials and the volume of work done in the shop. The higher the productivity of labor of the shop workers and the greater the volume of orders for work during the year, the smaller the size of the general production expenditures for repair of machines.

The experience of the best MTS shows that the most effective means of reducing repair expenses and improving exploitation of tractors is a system of tractor repairs around the year. In such a case the need for repair workers is smaller and this permits their fuller use evenly throughout the year. But when repairs are concentrated in the December-February period, the number of workers needed increases twice and three times as compared with normal needs, though these workers are not used in other seasons.

In connection with changing to the year-round system of repairs there arises a question of how to use space, machines, and equipment of available machine-tractor repair shops. Such shops were designed for use during the period of maximal load of tractor fleet repairs, that is, during December to February. In a system of seasonal repairs, the shops during the period of field work, as a rule, sharply reduced their work. With transition to the system of work around the year the shop designed for seasonal work would not be fully loaded during the whole year. This problem may be solved by taking work from outside. For example, the Talovsk MTS, one of the best in the Voronezh region, after the introduction of work around the year for repair of its own machine-tractor fleet, took orders (though still on a small scale) from collective farms and other organizations for repair of trucks and other equipment. As a result, its equipment was more fully utilized, labor productivity increased and the wages of repair workers rose. If, in 1956, on the average all repair shops of the MTS of the Voronezh region per annual worker had a gross production valued at 8,300 rubles, including 585 rubles for work done for outsiders, for the Talovsk MTS the corresponding figures were 10,900 rubles and 2,380 rubles.

One of the better measures for increasing the responsibility of tractor workers in caring for machines is a bonus system for responsible workers. However, the existing system of bonuses for tractor brigade workers connected with caring for machines and economizing on repairs, in our opinion, is not good as an incentive. For example, according to existing rules the workers who do not fulfill the plan of tractor work by some types of work are deprived of the bonus even if, as a result of this, the yield not only did not fall, but, on the contrary, increased. But it is known that in agriculture, as a result of certain meteorological conditions, it is necessary frequently during the season to substitute some tractor work with others (for example, in the period of drought excessive harrowing and cultivation are harmful, though they may be in the plan). Furthermore, the director of the MTS has no right to grant a bonus to a worker, but has to present the necessary data about it to the regional agricultural administration. In our opinion the existing rules concerning bonuses should be re-examined and directors should be given the right to give bonuses to workers who carried out the prescribed amount of work per tractor without repairs, cared well for their tractors, saved repair funds and carried out field work in accordance with the best agricultural practice.

Until now the MTS system of storing and repairing tractors and other machines is such that after the end of field work the whole machine and tractor fleet is brought to the repair shops and in spring, after the end of repairs, is brought back to the place of work where there are tractor brigades. Such a system results in great expenditures of fuel, in breakdowns and premature wearing of machines. We believe that it would be better to end this annual movement of machines and tractor fleets from brigades to the central repair shop of the MTS and back. To the central repair shop should be moved only units, engines, and machines which are in need of capital repair. In winter time it is better to store the rest, and especially attachable implements, on collective farms served by the tractor brigade. It is also advisable to organize at the tractor brigades, with the help of collective farms, small repair shops with a forge and a shed for storing machines. In these shops current repairs of attachable implements of MTS and implements of collective farms could be performed, and this would bring significant savings.

Large areas for lowering costs and work of MTS can be found in improving the work of tractor brigades and cutting down the number of excessive brigade managerial and service personnel.

The size of a tractor brigade is determined by the volume of work in the fields by the collective farm or field brigade which is attached to the tractor brigade. In MTS of the southern and eastern regions of the country where collective farms have large areas of land the size of the tractor brigade is considerably larger than in the central and northern regions. On the average in the Altai region there are in each brigade 14 tractors (in terms of 15 HP) and in the Kalinin region — eight. Yet, whether a brigade is large or small, the number of supervising and servicing personnel (brigade chiefs, their assistants, controllers-servicing personnel) is changed little. Thus, in a small brigade, as a rule, there are, per unit of work, relatively more labor days for maintenance of such personnel. The number of labor days for the maintenance of administrative-servicing personnel of a tractor brigade, as a per cent of labor days earned by tractor drivers and "attachers" in 1956, was as follows: in MTS of the Krasnodar region — 24, in the Altai region — 26 in the Kalinin and Moscow region — 32 per cent. Cutting down the number of administrative-servicing personnel in tractor brigades is possible not only through making them bigger, but also through giving the duties of a brigade chief to one of the senior tractor drivers of a small tractor brigade in cases when creation of such a small brigade is necessary.

The practice also shows that the chief of the tractor brigade and the controller-service man may take care of the management and control of the tractor brigade, so that the position of assistant to the chief becomes superfluous. For example, in the Pavlozavodsk MTS, Altai region, in 1956 the position of assistant was abolished in all MTS brigades. And yet the MTS personnel not only lowered the cost of tractor work by 9.2 per cent and expenditures per centner of grain received by more than 20 per cent, as compared with 1955, but also successfully carried out its field work. The economy in wages in that station reached 90,000 rubles and — if we include the expenses of the collective farms for the labor days of such assistants — more than 150,000 rubles. Abolition of such positions in all MTS would permit a transfer to direct work of many experienced workers and will bring a large economy in wages for MTS and collective farms.

One of the important tasks in lowering expenses per centner of grain received for the work of MTS is lowering the number of seasonal workers and wide application of the practice of work without "attachers." Experience shows that in a number of cases there is no need for each tractor driver to have an "attacher." First, in the tractor brigades there are hinged implements which do not require a person to attach them. Second, experienced tractor drivers working even with attachable implements frequently do the job without "attachers." In 1956, in MTS, on the average there were 0.7 attachers per tractor driver; in the Krasnodar and Altai regions the ratio was 0.7, but in the Moscow and Kalinin regions — 0.2 and 0.4. The best MTS of the southern and eastern regions also succeeded in sharply reducing their number. For example, Sovietsk MTS, Krasnodar region, in 1956 brought the number of attachers down to 1 for each 2 to 3 tractor drivers by using them only in really unavoidable cases (use of large and complex aggregates). As we cannot as yet completely give up seasonal workers, it is advisable to have an attacher for each 2 to 3 tractor drivers. They should not be used with individual tractor drivers, but be at the disposal of the brigade chief who should send them every day to work with those tractor drivers who need them.

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One of the important sources of economy of tractor work is improvement in the management of MTS and putting an end to excess managing personnel. As is known, one of the causes of the expansion of managing personnel was the approval in 1953 of standard staffs of MTS. According to these standards the personnel was established independently of conditions and volume of work of MTS. In 1956 these standards were abolished and new ones introduced in which conditions and volume of MTS' work in the various zones of the country were taken into consideration. However, even now the size of the management personnel does not always correspond to the volume of MTS' work, as the comparison of the results of work for some MTS in 1956 shows:

	Altai region		Kalinin region	
	Topchikhinsk MTS	Pushtulinsk MTS	Krasnokholmsk MTS	Goritsk MTS
Volume of work (in thousands of ha. of plowed land)	178.1	46.9	117.4	30.6
Number of farms served	8	10	33	22
Total expenditures per ha. of plowed land (rb.)	25.02	47.88	30.85	51.21
Including mngt.	2.13	5.67	4.00	9.69
Per cent of total	8.5	12	13	19
No. of persons in management	50	42	66	54

These data show that in Pushtulinsk and Goritsk MTS, where the volume of work is 25 per cent of that in Topchikhinsk and Krasnokholmsk MTS, the number of persons in management is only slightly less than in the last two MTS.

That the existing standards of personnel require an excessive number of persons may be seen from the experience of Pavlozavod MTS, Altai region. In that MTS in 1956 the following standard positions were abolished: agronomist-planner (duties given to the chief agronomist and bookkeeper), man in charge of the oil base (duties given to person in charge of oil economy of the MTS), four district mechanics whose duties were combined with those of the tractor brigade chief and dispatcher. A technician-electrician was transferred to piece work for repair of electric equipment, etc. Total number of management personnel abolished was ten with annual wages of 78,300 rubles.

The necessity of re-examining the standards of personnel may be seen from the fact that the character of MTS work is changing every year with changing conditions of management of MTS and collective farms. Now, in many MTS, tractor brigades are combined with field brigades forming tractor-field brigades, the guidance of which is largely carried out by chairmen of collective farms. In connection with this, the volume of MTS work in guiding the field work on collective farms is being reduced and, in view of this, the apparatus of MTS may be substantially cut down. It is advisable to carry out a reduction in the size of the management personnel not only through combining functions in small MTS, but also through abolition of positions which became unneeded because of new and special conditions of production. One of the measures for reducing administrative-management expenses is putting an end to excessive personnel and instituting strict control over the size of personnel and budget discipline of the MTS. For example, in 1956 administrative economic expenditures exceeded planned expenditures in MTS of the Altai region by 1,341,000 rubles, those of the Krasnodar region by 834,000 rubles, of the Kalinin region by 692,000 rubles, etc. As a rule, the largest overexpenditures of funds result from detached service, transfer of personnel, and maintenance of passenger cars. The cause of this is the frequent unplanned calls of the guiding workers and specialists of the MTS to regional organizations for all kinds of meetings and conferences, for preparation and approval of the plan of work, etc. In a number of MTS extra chauffeurs for passenger cars are maintained, not foreseen by the standards. For example, in MTS of the Altai region, 53 chauffeurs over and above the planned number were occupied in 1955. The cause of rude violations of the budget and standard personnel discipline is weak departmental control over the financial activities of the MTS.

An important means of reducing management personnel and administrative-economic expenses, in our opinion, is making MTS bigger. In large MTS the expenses per ha. of plowed land are reduced because of better use of the tractor fleet, better training of the personnel serving machines and fewer administrative-management personnel in relation to the volume of work of the MTS.

The smaller the MTS, the higher the expenses for maintenance of management personnel per ha. of tractor work. For example, in 1956, in the group of Altai region MTS, where the volume of work is up to 75,000 ha. of plowed land, the administrative-management expenses amounted to 6.27 rubles per ha. of plowed land, or 16 per cent of the total expenses. In the group of MTS of the same region, where the volume of work is more than 150,000 ha. of plowed land, corresponding expenses for a year amounted to 2.64 rubles and were less than half of the former.

To illustrate the advantages of making MTS larger we shall cite an example of merging the Leninsk and Molokovsk MTS of the Moscow region. Before their merger, the volume of work was small. Leninsk MTS served 11 collective farms with a sown area of 5,960 ha. and Molokovsk, 18 collective farms with a sown area 9,900 ha. As a result of their merger the work of Leninsk MTS improved. The amount of seasonal work done by its tractors increased in 1956 by eleven per cent as compared with 1955, the cost of work was lower by 15 per cent, the state expenditures per centner of grain collected were lowered by 18 per cent for potatoes, 14 per cent for vegetables, and 13 per cent for meat. The yield of potatoes in the collective farms was almost doubled and that of vegetables increased by 32 per cent.

Yet, despite great advantages in the work of large MTS, the number of MTS in the country increased from 8,414 in 1950 to 8,971 in 1955, though the number of collective farms served by them during the same period was reduced by more than half.

In our country there are now a large number of MTS with a small amount of work as well as MTS serving only one or two collective farms. Combining such MTS would result in large economies in tractor work. Of course the approach to merging MTS in various zones of the country should be different. In the grain regions of Siberia, Kazakhstan and the southern part of European USSR, the size of MTS may be larger than in the northern and central regions, where collective farms are dispersed and have smaller areas of plowed land. First, it is advisable to combine small MTS which are close to each other in the same district, under the condition, however, that larger MTS would be in the center of the collective farms served, thereby minimizing expenses in transporting machines to the tractor brigades.

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One of the important means for improving the use of machine-tractor fleets and economizing costs per centner of grain received is placing MTS on a self-paying basis. However, before doing this it is necessary to solve a number of important questions.

First, the existing system of financing MTS has great shortcomings. The most important of them is that it is not tied up with the financial results of the operations of the MTS, namely, with the yields of agriculture and productivity of cattle-breeding in the collective farms served by MTS. In addition, the financing of MTS does not depend on the amount of money and grain received for work done, and this lowers the responsibility of guiding workers and specialists in carrying out the plan of delivery of grain and other products to state warehouses.

A correct solution of such questions as the establishment of different price zones for products received as payment for work done, alloting to MTS their own circulating funds, establishment of the rules of obtaining credit for such MTS in the State Bank, formation of an enterprise fund, etc., is also important. In this article not all problems connected with turning MTS into independent economic units are considered because they either require a special investigation or have been outlined in existing literature. Nevertheless it is necessary to draw attention to one very important question: payments to MTS for expenditures made to obtain products used as payments in kind for the work performed for collective farms.

The existing system (since 1954) of payments in kind brought better order into the financial relations between MTS and collective farms. Yet this system has serious shortcomings. Despite the fact that the rates of payments in kind for grain products are different for different zones of the country — soil and climatic conditions of agricultural production of the republics and regions vary — yet these rates of payments in kind for every type of tractor work do not correspond to MTS expenses (in terms of ha. of plowed land). This may be seen from the following data of expenses per centner of grain and meat received by MTS of various regions (in rubles):

Kinds of work done	Altai region		Krasnodar region		Kalinin region	
	Grain	Meat	Grain	Meat	Grain	Meat
Plowing of farm land	66.20	522	17.50	364	148.50	619
Harrowing	66.50	354	21.10	258	229.00	595
Cultivation	81.40	399	25.20	284	216.00	542
Sowing of wheat, etc.	56.20		16.60		144.50	
Mowing of grass		401		292		736
Stacking hay		290		206		521
Bringing hay, fertilizers, etc., for a distance of 1-3 km.		1,810		1,290		2,160

These data show that because there is no correlation between the rates of payment in kind and MTS work done there is a tremendous difference in expenditures per centner of production. Especially low rates for payments in kind are established for bringing hay, straw, and other products to collective farms. The disparity between rates of payment in kind and expenditures of MTS results in overexpenditures by MTS. For example, in spite of the high prices established for long staple flax expenditures of MTS, the work done for this product to a substantial degree is not covered by payments in flax, and the state suffers serious losses. In 1955 MTS spent on work for this product 186.5 million rubles, but the total received in flax at purchasing prices amounted only to 151 million rubles. In 1956 expenditures of MTS for this product amounted to 231 million rubles and the total flax received as payment in kind amounted to 197 million rubles. Thus, in two years the state, through MTS, lost 69 million rubles on these operations.

Also among the serious defects of the existing system of calculating payments in kind are insufficient incentives for MTS workers to increase yields. Payments for harvesting with combines, threshing grain, and harvesting cotton with cotton harvesters is calculated on the basis of grain threshed and cotton obtained. But this is an exception. For all other products MTS receive a fixed rate of payments, not based on yields. It is prescribed only that MTS which overfulfill planned goals in respect to yields of agricultural products receive additional payments (above the established rate of payments in kind) amounting to 10 per cent of the products obtained over and above the plan for this product. Thus, independently of the amount of work done by MTS and collective farms in obtaining the excess, MTS are getting 10 per cent and collective farms — 90 per cent of this excess over the plan. But such an arrangement economically has no basis. For example, in the zone of Topchikhinsk MTS, Altai region, in 1956 MTS spent on the production of one centner of grain products about 30 per cent of the total costs. The MTS received 10 per cent in kind of the excess of the planned production, or 8,900 centners, when its costs entitled it to 25,200 centners. On the other hand, the expenditures of one of the best MTS in the Kalinin region, Krasnokholmsk MTS, for long staple flax made 7-8 per cent, while, according to this arrangement, it also received 10 per cent of the excess of the harvest.

Thus, in connection with the existing order of financing and calculating of payments in kind according to fixed rates per ha. of work done, the workers of the MTS are placed in a position where they are interested not so much in increasing yields, as in a maximal increase of the volume of tractor work as expressed in hectares of plowed land. MTS are not responsible for the lowering of yields, if they fulfill their work on time as determined in the contracts, because — if the volume of tractor work was fulfilled according to plan, the volume of payments in kind, calculated according to the fixed rate, will be close to the planned one. Yet it is clear that as both sides, the collective farm and the MTS, are contributing to the yield, both sides should be materially responsible for the results obtained in proportion to their participation in material and labor expenditures for the work of cultivation of this or that agricultural product.

In line with this it would be advisable to establish a method of determining payments in kind which would consider the amount of means of production used for the output of given products and of the labor of MTS workers. As MTS and collective farms take part in agricultural production, it would be just to distribute the gross harvest between them proportionally to the work done by each. This method of determining the part of MTS in the harvest as a part of the expenditures for production would give material incentive to MTS workers for raising yields. In order to avoid unnecessary expenditures per centner of produce by collective farmers or MTS it is necessary to determine payments in kind not by actual expenditures, but by planned ones, approved in financial plans of MTS and collective farms and written down in contracts for the business year. Actual expenditures in excess of planned ones should be taken into consideration only when they contribute to a rise in yields of that product.

However, the cost of the means of production used and the wages of the workers of MTS (paid out of the budget of MTS) make up only the cost of the product received as payment in kind. Thus, in the interests of proper distribution of products created by MTS and collective farms it is necessary that expenses of the past and present labor of MTS be expressed in money, and added to the cost of the products for society created by workers of MTS, that is, accumulation. The levels of these accumulations may be differentiated by zones, depending upon the soil and climatic conditions. Where the land of collective farms is very fertile by nature and where, because of that, there emerges a differential rent where the same amount of labor creates more products, accumulation should be higher. It is also advisable in such cases to include in the expenditures of collective farms for production of certain products determined for given zones, the planned value of the labor day of collective farm members and workers of MTS tractor brigades, fixed in the production-financial plan of collective farms (we consider that in the collective farms an annual production-financial plan will be prepared).

Improvement in the methods of determining payments in kind for work done by MTS would serve as an incentive for MTS and collective farms to raise yields of agricultural products and to use the means of production more effectively.

I. Blyumin:

The Crisis of Contemporary Bourgeois Political Economy

A great deal has been written in bourgeois literature concerning the crisis of bourgeois political economy. Several monographs on this subject appeared in Germany in the Twenties, for example, the monographs of A. Gunther, L. Pole, R. Stolzman and O. Schpann. Many complaints were voiced in German bourgeois literature of that period about the discord reigning in economic science and about its inability to solve the new problems created by life. Although less frequently, similar complaints were also found in German literature of the Thirties. For instance, H. Wagenführ wrote the following in 1933, when he characterized the state of bourgeois political economy: "There exists no single system upon the perfection of which constant work is done; there can be no question about investigating the functionality (or correctness) of a limited number of systems (as is done in mathematics and natural sciences). In reality, a great number of politico-economic systems — in the majority completely unconnected — are opposed against one another." In conclusion, Wagenführ comes to a sad evaluation of political economy: a "chaos of ingrown views" reigns in it.[1]

Opinions of this kind are found quite often in the British economic literature of the Thirties. A lecture in political economy delivered in the University of London by A. Young and published in 1928 is quite characteristic of the mood of English economists. The world, he asserted, creates before the economists more problems than ever before, and they are presented with greater and greater insistence. The economists, according to Young, can still somehow find an answer to the old problems. Concerning new problems, the economist feels not much more competent than the layman.

After the Second World War, the subject of crisis in political economy began to be discussed with particular animation in French political economy. The progressive French writer A. Denis, author of the work entitled "Crisis in Political Economy" (1951), notes that the complaints against political economy are voiced in a more stringent form in France than in Anglo-Saxon countries. Criticism of bourgeois political economy comes from professional economic theoreticians as well as from administrators, engineers and active people in general.

A well-known French economist, J. Fourastié, wrote "The aim of our article is to recognize the failure encountered by economic investigation in the manner in which it has been carried out up until today."[2]

The fact that first the German, then the English and American, and, finally, the French bourgeois economists came out with statements about the crisis of political economy is not difficult to explain. In Germany, a country which suffered defeat as a result of the First World War, and which had to bear the load of the Versailles Treaty, the social and political crisis of capitalism was uncovered first. It is not surprising then that the desire to rebuild bourgeois political economy manifested itself there for the first time. The Thirties were critical years for England and the USA because they felt particularly strongly the effect of the world-wide economic crisis of the period 1929-1933. Dissatisfaction with worn-out, vulgar theories sharply increased in England and in the USA at that time, and the search for a new solution of economic problems was initiated. In this connection, complaints against the traditional economic theories known in these countries under the misapplied term of the "classical school" multiplied. In France these factors appeared later; particularly as state-monopolistic capitalism underwent noticeable development in this country only after the Second World War. In this way, the sequence in which the greatest acuteness of political and economic contradictions appeared in various contries also determined the countries in which the subject of the political-economic crisis was discussed most.

The bourgeois economists reduce the crisis of political economy merely to a crisis of old theories which do not satisfy new practical needs. Looked at from this point of view, the crisis of bourgeois political economy only signifies the necessity for its reconstruction, and for the search for new theories which could solve the newly-ripened problems. According to this interpretation, the crisis of bourgeois political economy only means the transition from one stage to another, i.e. it is of a temporary character. When the problem is treated thus, it is concluded that the crisis of bourgeois political economy is some kind of sympton of the progressive evolution of economic thought. This deduction is made by some bourgeois economists. For instance, the French economist, André Marchal, characterized this crisis as a "crisis of growth." "This," he writes, "is rather a renovation, which is a definite indication of vitality; it is, if you like, the manifestation of the 'crisis of growth,' the turning point of economic thought. This is the critical period when everything, including that which seems beyond question, is united under the question mark."[3] Some bourgeois authors go even further and assert that the difficulties of economic science are not evidence of a crisis of maturity, but rather of childhood disease. There are also those economists who try to establish in the history of economic teaching something similar to a cycle of alternating ideas of laissez-faire and government regulation of economy, because they see in the crisis of bourgeois political economy something like the shift from one cycle to another. The American economist, L. Haney, draws a picture in which the history of economic thought supposedly contains a cyclic birth of ideas about the stipulation of economic laws by governmental and legal factors and in which present-day bourgeois conceptions are nothing other than the rebirth of mercantilistic ideas. He writes: "At the present, the world is witness to the rebirth of mercantilism, which may in certain respects be considered as a reaction against neo-classicism... Even the economic ideas of the mercantilists triumph; for example, the mercantilist ideas about money and the balance of trade. Trading companies in the 16th and 17th centuries were as if repeated in the form of corporations, encouraged by governments to develop export trade; the union of businessmen in each branch of industry may be paralleled to the guilds; the labor organizations, also, in great measure have guild-like characteristics."[4]

These analogies are naturally of a purely formal and superficial character. It is clear to everyone that there exists a huge difference between measures taken to strengthen capitalistic industry in the period of original accumulation of capital and the policy of the enrichment of monopolies at the expense of the governmental budget during the imperialistic period. Measures of the first kind objectively accomplished a progressive role; those of the second category are of a deeply reactionary nature. The difference between them is as great as the difference between capitalism in the stage of being established after it came to replace feudalism, and, in general developing along an ascending line, and present-day capitalism, rotting and dying out, in its imperialistic stage.

A characteristic trait of bourgeois etudes of the present state of political economy is the combination of affirmations of the existence of crisis in bourgeois economic science together with noisy advertisement of a supposed revolution in this science. Statements about this "revolution" are usually accompanied by eulogies of the "accomplishments" of Keynesianism. Usually, bourgeois economists speak of the "Keynesian revolution." The contradiction between statements about crisis and about a "revolution" in bourgeois economic science is apparent at first glance. Some economists stress the weakness of this science and others — its strength. Some of their statements are filled with pessimism, while others have a clearly expressed optimistic character. Yet, these expressions, so outwardly dissimilar, are in fact easily reconcilable. If the crisis of political economy is reduced to the necessity of a forthcoming overhaul, it is then easy to deduce that after the manifestation of such a necessity, a reconstruction — which is announced as a "revolution" — will take place. In the light of such a treatment, both crisis and "revolution" appear to be two stages of the same process of reconstruction, as its beginning and culmination.

The cardinal vice of the bourgeois explanation of the crisis of political economy consists in ignoring the connection between the ideological crisis and the crisis of the capitalist system itself. The latter causes specific changes in the bourgeois ideology. This shows how the death of capitalism is reflected in the crooked mirror of bourgeois consciousness. The crisis of bourgeois political economy is above all the reflection of the critical situation of capitalism itself; precisely under these conditions an entirely new problem arises before bourgeois ideologists — the task of saving the historically doomed capitalist system. This problem is by its own nature insoluble. Certainly, no kind of reconstruction of the bourgeois political economy is capable of solving it. Therefore, there can be no way out of the ideological crisis, for this is not a "crisis of growth" but a crisis of the decay and downfall of bourgeois economic thought. There are absolutely no foundations for the comparison and identification of this event with a change of bourgeois economic thought from mercantilism to classical political economy. At that time, the making-over was progressive. It armed the bourgeoisie with a new and more scientific ideology and promoted the practical resolution of new problems which faced capitalism. The present-day reconstruction of bourgeois political economy is of a reactionary character; its aim is to delay the historically inevitable movement of mankind toward a new and more progressive socio-economic system. The crisis of contemporary bourgeois political economy reflects, in this way, the evolution of this economy under the direct influence of the crisis of the capitalist system itself.

The Great October Socialist Revolution delivered a powerful blow to bourgeois political economy, the vital mission of which consists in grounding the eternity and indestructibility of capitalism. The practical aspect of the construction of socialism in the USSR and, at a later time in the people's democracies of Europe and Asia, refutes the attempts of bourgeois apologists to prove the impossibility of the existence of a socialist economy. The brilliant successes of economics in the socialist countries clearly showed to the whole world the great advantages of a socialist economic system over capitalism.

The reactionary character of bourgeois economists has increased with new historical conditions. The struggle with socialism signifies in present times not only a struggle with Marxist-Leninist doctrine, but also with its practical application — i.e., with the socialist social structure which has been victorious in the USSR and which is paving its way in the people's democracies.

The formation of two world systems — capitalist and socialist — has brought about the crisis of all the traditional beliefs of bourgeois economists. They are forced to speak of the danger threatening the capitalist system, in other words, to cast doubt upon the basic premise of the entire bourgeois political economy.

The well-known bourgeois author, Kerr, was obliged to note in his book on the subject of "Soviet Influence upon the Western World" that bourgeois civilization is experiencing a profound crisis, since there is a new civilization which serves millions of people and exerts tremendous influence upon the whole world.

The American publicist, W. Lippman, in a book entitled "America in the Contemporary World," vividly narrates the influence exerted upon bourgeois ideology by the falling out of a third of mankind from the capitalistic orbit. "We assumed," he writes, "that all the peoples would have the same basic political ideals that we have... We thought that all mankind would advance toward the same order in which we believed... This supposition about ourselves, about our place in the world, about our part in the history of humanity is now no longer valid. The culture and ideology of Western (i.e., the capitalistic — I.B.) society are no longer recognized as universal. A challenge is being thrown at them, such as they have not encountered since the clash of Christianity with the advance of Islam." Lippman compares the recognition of the limitation of capitalism to the change from Ptolomean astronomy, which considered the earth as the center of the universe, to the astronomy of Copernicus. "Western society, which at some time represented the center of the political universe, has now become but one of the planets, though truly a large planet, but nevertheless one planet in a much wider solar system."

The second decisive factor to bring about the crisis of present-day bourgeois political economy has to do with the aggravation of socio-economic contradictions in a period of general crisis in capitalism. It has become quite difficult for bourgeois economists to depict capitalism in an idyllic light.

The factors which influence bourgeois economics, enumerated above, are all closely interwoven. The revolutionizing influence of the socio-economic contradictions of capitalism upon those who work increases because these contradictions appear in the competition of two world systems.

The atmosphere of intensification of the socio-economic contradictions of capitalism creates a mounting threat to the latter. Mass unemployment has a particular significance in this respect. Thus, the Canadian economist, P. Casselman, directly states that the possibility of the victory of collectivism will become a reality "if we do not control unemployment with relatively mild forms of government intervention. ... Without doubt, the workers and trade unions of North America and of other parts of the world will not suffer a serious depression, such as the one which paralyzed world economy in 1930."[5]

Because of the conditions of competition which exist between two systems and because of the increased acuteness of the socio-economic contradictions of capitalism, bourgeois economists are forced to add correctives to their methods of justifying the capitalistic system.

A most important moment, characterizing the evolution of bourgeois political economy in the period of the general crisis of capitalism, is the statement of a new problem: How to guarantee the existence and normal functioning of the capitalist system. The economists of the 19th century did not face such a problem. The unhindered development of capitalism appeared to them obviously true. To contemporary bourgeois authors, however, this problem is the most essential and the most acute. Many of them openly express doubt about the possibility of preserving capitalism. For example, the American bourgeois economist, G. Soule, writes: "It is possible that the prediction of Marx was erroneous as to timing rather than in essence. It is possible that a catastrophic crash of capitalism will take place at some time in the future."[6] Professor Heiss of the University of Ohio wrote in a similar spirit: "It is possible that our present system of private enterprise cannot be saved."[7]

Some bourgeois authors simply raise the question of "the salvation of capitalism." In this respect, a collection published in 1948 in the USA with the tell-tale title of "Saving American Capitalism" is characteristic. Throughout the whole work the point of view that extraordinary measures are necessary in order to heal the capitalist economy and lend stability to it is prevalent. In the lea article, the editor, Seymour Harris, characterized the position of contemporary capitalism in this manner: "The difficulties which capitalism encountered in the Thirties seemed insurmountable; it may be that today they are even more so; the defense of patched-up capitalism against the intrusion of socialism is in no way guaranteed." He expresses his conviction that without reformation the capitalist system will not withstand the test: "Unless we perform a surgical operation upon our economic system it will not survive." The mood which feeds the crisis of bourgeois political economy is reflected in the following words of Harris: "We are disposed in favor of capitalism, but we assume that it must prove itself the most effective economic system."[8] The publication in the USA of a collection entitled "Make Capitalism Work" (1950) is also characteristic of this attitude.

The loss of faith in the function of the internal forces of capitalist economy is another important phase of the crisis of contemporary bourgeois economic science. Of course, modern bourgeois economists have not given up, nor will ever give up, he defense of capitalism. Yet, they are obliged to add serious orrections to their apology. They admit that capitalistic eco- omics need some kind of artificial measures and some kind of uttresses or crutches without which they cannot function and evelop normally. The author of economic essays, Eric Johnston, as very vividly expressed these opinions of American businessmen, widely held in bourgeois circles. He wrote with irritation hat many who are active in the bourgeoisie imagine capitalist conomy to be a patient in need of treatment. This “patient, in heir opinion, can live through, but will remain a chronic invalid who feeds on governmental pills and hobbles with the help of ureaucratic crutches.”[9]

In times gone by, the “truth” of the so-called automatic movement of the capitalist mechanism was self-evident to ourgeois economists. It was considered, for instance, that if nemployment occurred anywhere, it immediately set in motion orces (such as the lowering of wages or the increase in demand or labor power) which made it possible for unemployment to be vercome. Furthermore, it was considered that the capitalist ystem disposes of sufficient internal forces to overcome any conomic difficulties, any disproportions, any crises, and any nemployment problems. This attitude made up the pith of raditional bourgeoise apologetics. But because of the conditions f the general crisis of capitalism, it becomes progressively more difficult for bourgeois economists to maintain this position. hey are forced to corrections and additions. One real fact is eflected in the crooked mirror of bourgeois political economy: he functioning of the internal forces of capitalism under present onditions is becoming more difficult. This fact, however, is reatly misconstrued by bourgeois economists. They attempt o show that artificial factors may be discovered which will be apable of restoring the normal functioning of capitalist economy. A ubstantial reformation of bourgeois apology, thus, is taking place nder the conditions of the general crisis of capitalism: the exalta- on of the internal forces of capitalism and of the automatically func- oning mechanism of capitalist competition is replaced by the carol- ng of artificial factors — government intervention in economics.

Bourgeois economists more and more frequently appeal to gov- rnment as a force supposedly capable of correcting the “defects” the automatic functioning of the capitalistic mechanism. The merican economist R. Patton, for example, considers that “The overnment must assume the function of compensating for the de- cts of the private economy by means of such actions as the increase its debt when sums are spent or invested greater than those which ay be obtained from its current revenue.”[10] Bourgeois econo- ists particularly stress the fact that government must compensate e deficiency of total demand in relation to production by increasing s disbursement. “If private spending is insufficient,” the American onomist, J. Clark declares,“the obvious and simple method for this ficiency to be filled is by increased government expenditure.”[11]

According to the plan of bourgeois ideologists, government must sume the coverage of losses incurred by the crises and, in general, the results of the anarchy of capitalist production. The American onomist, G. Steiner, who has written a work dedicated especially the economic role of the bourgeois government, stresses that the ost important function of such a government is “for the administra- on to take upon itself. . .the risks connected with the functioning of e economic system.”[12]

The opinion that the function of government in the realm of eco- mics must be deduced from a systematic analysis of the deficien- es of the market system is widely spread among bourgeois econo- ists. A similar argument is brought forth by certain authors in de- nse of “planned capitalism.” Thus, S. Harris asserts: “The neces- y for planning results from the failings of our economic system.”[13]

Many contemporary bourgeois economists, and especially those Keynesian tendencies, treat government intervention in economics a factor capable of changing the interaction of economic laws and ace new paths for economic development. For example, the well- own American economist, Hansen, writes: “The economy in itself incapable of generating enough energy in order to completely as- re all possible growth. Without help from the powerful financial sources of the Federal Government, we will find ourselves inca- ble of reaching maximum production, employment and purchasing wer, to use the words of the Employment Act of 1946.”[14]

The idea of the leading role of government in the realm of econom- is being increasingly disseminated throughout bourgeois economic literature. It is recognized in many official declarations of bourgeois statesmen.

Contemporary bourgeois theories concerning the decisive role of government in economic life show how the fact of the increased role of the bourgeois government, characteristic of present-day capitalism, is refracted in bourgeois political economy. Undoubtedly, this is a very important tendency, but it is presented in a distorted image in the writings of bourgeois economists. These economists carefully conceal the class nature of the modern imperialist government which is subjugated to, and stands as a guard of, the interests of capitalist monopolies. It is impossible, however, to determine the essence of measures taken by bourgeois governments in regulating the economic structure without accounting for this class nature. These measures are carried out in the interest of the enrichment of monopolies and have as a consequence the increased exploitation of the workers and the lowering of the standard of living (as a result, for instance, of increased taxation). In the final analysis, the measures of regulation taken by a bourgeois government, because of its class nature, lead to a decrease in the consumption demand of large masses. The latter play a decisive role in the determination of the general scale of individual consumption in bourgeois society. Such measures, therefore, only help to accentuate the contradictions connected with the purchase of products and with the ripening of the economic crises of production.

In the context of capitalism, the state can only regulate separate processes of the development of the economy (the development of war industries, for example); it can control neither the total process of social production nor the entire national economy. This is explained by the fact that in any capitalist country, in spite of the partial nationalization in some nations of certain branches of industry, the great bulk of the means of production remains in the hands of the capitalists. The rule of capitalist private property inescapably presumes the concentration of management in the hands of separate capitalist enterprises and the absence of a single administration of the entire social industry. Whatever reforms the bourgeois government may introduce, it does not encroach upon the “sanctum sanctorum” of bourgeois society — capitalist private property, inseparably related to the recognition of the sovereign rights of capitalists to enterprise, and, to the recognition of the autocracy of capital over workers.

The bourgeois theories of the decisive role of government in the economic life of capitalistic countries not only reflect in a distorted way the increase of state-monopoly capitalism, but they also represent the reaction to the success of socialist society. These theories attempt to ascribe to bourgeois government functions of economic organization which socialist governments are so successfully performing. In reality, these functions can only be realized under socialist conditions, for they are predetermined in the very nature of socialist society.

That the ideas of “regulated capitalism” have been so widely publicized in bourgeois literature in the post-war period in spite of the fact that the majority of capitalist countries are, since the beginning of 1950, in a phase of industrial uplift, is most indicative of the crisis of bourgeois political economy. Usually, appeals for government intervention into economic life increase during periods of economic crises and depressions. In a phase of animation and improvement, however, criticism of government regulation of the economy on the contrary prevails in bourgeois literature, and the appeal for an economic policy based upon the principles of laissez-faire is widely disseminated. This has happened in the past, particularly in the twenties when prosperity in industry was observed in several countries (in the USA, for example). Under present conditions this rule is broken: with the presence of a comparatively prosperous situation in capitalist countries, ideas of “regulated capitalism” continue to reign in the bourgeois world. This is directly related to the fact that the post-war uplift is developing, in considerable measure, upon the weak foundation of an arms race and of other ephemeral factors.

The crisis of bourgeois political economy also finds expression in the new forms of social demagogy which bear the stamp of the moral bankruptcy of the capitalist system. The sign of the times is that many bourgeois ideologists do not dare to come forth before the masses with an open defense of capitalism and attempt to camouflage this defense with a formal verbal critique of capitalism and with a juggling of socialist phraseology. In this respect the majority of economists today significantly differ from the old bourgeois economists who openly played the role of advocates of capitalism and were open enemies of socialism. The circumstance that bourgeois apologists are obliged to use socialist terminology in order to defend capitalism is an indirect admission of the bankruptcy of the capitalist system and of the invincible power of socialism. The morally bankrupted social system attempts through its ideologists not only to mask its true face but also to dress itself in the guise of its enemy — socialism.

New methods of social demagogy represent the direct reaction of bourgeois economic thought to the enormous accomplishments of the socialist system. The fact that socialism has long ceased to be a theory alone has decisive significance. In the Soviet nation socialism has become a reality and is firmly entrenched in the way of life of a people of over 200 million. It is successfully being established in the people's democracies of Europe and Asia. It has proved its great advantages over capitalism in practice. Because of this, the force of attraction of socialist ideas has grown immeasurably. The bourgeois ideologists are forced to take this fact into consideration and recognize the vast influence of the Soviet experiment upon the workers of capitalist countries.

In order to lessen in some measure the paramount influence of the great socialist state and of the people's democracies, bourgeois ideologists strive to prove to the masses that socialism does not exist in the Soviet Union and in the people's democracies alone and that elements of socialism supposedly exist in capitalist countries. Not infrequently, the apology of capitalism is carried out under the banner of the progressive "socialization" of the capitalist system; supposedly, socialist elements peacefully interweave within the notorious "mixed economy." For instance, the American economist R. Patton declares that "nearly all economic systems — even those which now exist in the USA — contain some element of socialism."[15] Another American bourgeois economist, Adams, in a book treating the "competing economic systems," asserts that the difference between economic systems (of which he recognizes four: capitalism, fascism, socialism, communism) is much less significant than two or three decades ago. Collectivist tendencies, he notes, have become more sharply delineated in all contemporary economic systems. The bourgeois economist D. Wright flatly states that the difference between capitalism and socialism has, supposedly, lost its significance. "Today," he says, "when capitalism has become more socialistic and socialism more capitalistic, the usual labels have very little meaning."[16]

Such discussions of capitalism and socialism approaching one another give basis to the most paradoxical deductions. The movement in favor of socialism is explained by several authors as ... a way to the salvation of capitalism. The English Laborist J. Strachey for example, declares that "the struggle of democratic forces against capitalism has saved the system... It is the forces of democracy (the author equates the latter with socialism.—I.B.) that have heretofore upheld the last stage of capitalism in a nervous equilibrium."[17] The only meaning to this situation is that the right wing socialists actually help to preserve and strengthen capitalism, by diverting the masses from revolutionary struggle; they have thus betrayed the interests of the workers and those of genuine socialism.

The American publicist L. Fisher has expressed similar views. "The majority of capitalist countries, including the USA," he writes, "is forced to allow a certain amount of socialism. In fact, it is possible that this very share of socialism is what keeps the capitalist system in good health."[18] Fisher further explains that "socialism is merely the intervention of government in economic life." The monopolistic bourgeoisie, it is true, tries to strengthen the capitalist system and resolve its most acute contradictions at the expense of state-monopolistic development. And sometimes it is successful in this. But what has this to do with socialism? It is absolutely clear that genuine socialism is as different from state-monopoly capitalism as day from night.

In order to mask their antagonism to socialism and play the role of being "friends of socialism," bourgeois ideologists today attempt to falsify the concept of socialism. They try to remove from it its real, concrete content and meaning and reject such important elements of socialist society as the abolition of private ownership of the means of production and the establishment of social ownership. The right wing socialists also resort to this method. Thus, the noted theoretician of the English Labor Party and former aide to C. Atlee, F. Williams writes: "Social ownership of the means of production, propagandized in early socialist doctrines, is incompatible with the modern socialist conception such as it exists in England. What we are aiming for, is rather the combination of social ownership of the means of production in several important branches of industry, with private ownership of them in a considerably larger group of branches of industry, including the greater part of manufacturing, trade, and distribution."[19]

Camouflaging and filling up the very deep gulf which separates capitalism from socialism, contemporary bourgeois ideologists employ typical tactics when, at the same time, they picture an imaginary gap between socialism and communism, both of which represent, as it is known, the two stages in the development of communist society, which, in turn, is subordinate to the same general economic laws. There is only one "logic" in all these fabrications — the attempt to smear Communism in the eyes of the masses at any cost. Bourgeois ideologists, taking into consideration the great popularity of socialist ideas, have undertaken a double ideological maneuver: on one hand, they establish the presence of socialism where there is not a bit of it (in capitalist economy); on the other, they deny its existence where alone it is fully realized (in socialist countries). This magnificent quid pro quo demonstrates the wiles to which contemporary bourgeois apology is forced to turn in its attempt to show that it is not opposed to socialist ideas. This current reaffirms the fact that the masters of the modern capitalistic world do not feel secure and that they must have recourse to the use of terms and concepts borrowed from their socialist enemies.

The forms and methods of this singular mimicry are various in different countries and at different times, relative to the political and socio-economic atmosphere. The extent of capitalist contradictions and the degree of tension present in the overall political scene also have a very important significance. In those instances where the bourgeoisie feels most strongly a threat to its domination, it makes use of the methods of ideological mimicry — anticapitalist demagogy and socialist phraseology — on its grandest scale. In this respect, the demagogic methods of German fascism are most indicative. Fascism, for instance, disseminated the demagogy of the so-called "percentage slavey," calculated to exploit the profound enmity of small craftsmen, merchants and peasants toward usurious capital. G. Dimitrov, in a report made before the Seventh Congress of the Comintern in 1935, showed how the cover of social demagogy allowed fascism to fascinate and rally, in several countries which were affected by the crisis, the masses of the petty bourgeoisie, and even a certain part of the more backward strata of the proletariat, which would never have followed fascism if they had understood its true class character and its nature. "Fascism," G. Dimitrov said, "not only unleashes prejudices deeply rooted in the masses, but it also plays upon their best senses—their sense of equity and sometimes even their revolutionary traditions. Why do German fascists, these lackeys of the bourgeoisie, masquerade as 'socialists' and depict their coming into power as a 'revolution'? Because they aim to exploit the faith in revolution and desire for socialism which are alive in the hearts of the laboring masses of Germany."[20]

The fascists disseminated the legend that in Hitler's Germany some kind of "German socialism" had been created. Fascist agitators insolently asserted that supposedly there was no capitalism in Germany. They made use, moreover, of the most distorted sophistry.

The application of anticapitalist demagogy and socialist phraseology did not undergo the same extensive promulgation in those countries where the bourgeoisie feels more secure and where this class does not feel the necessity to have resort to the methods of fascism. But the above-described mimicry is nevertheless present in these countries as well. It takes a milder form, without stress on feigned antagonism to the capitalist system, but rather with the aim to show that contemporary capitalism has ceased to be capitalism, in the ordinary sense of the word. In particular, this tendency manifests itself in attempts to create a special theory — “the transformation of capitalism.” The essence of this demagogy may be briefly stated thus: Although capitalism has been preserved, yet its main characteristics — the domination of capitalists, the exploitation of workers, class contradictions, unemployment, crises, etc. — have evaporated and vanished unnoticeably.

New methods of bourgeois apologetics are closely connected with this form of demagogy. They manifest themselves in the attempt to beautify capitalism by assigning to it qualities and features which are true only of the socialist economic system. Bourgeois economists disseminate illusions as to the possibility of removing from capitalism such inescapable companions of this system, as crises, unemployment and anarchy of production. This demagogy is preached in the form of the theory of “crisis-free capitalism,” “full employment” and “planned capitalism.” The propaganda of similar theories is completed with assertions that in the modern capitalist world the pursuit of profits has lost its old paramount meaning and that the desire to satisfy the greatest possible well-being of society has become the most important moving force of capitalist production.

One of the new principles of bourgeois apologetics is the attempt to show that the rule of the capitalist class is a thing of the past and that the capitalists no longer play a dominating role either in the ownership of the means of production, in the ownership of enterprises or in receiving the greater share of the national income. This method of bourgeois apology has found its expression in the theories of so-called “people's capitalism.”

Those who preach these theories endeavor to show that capitalism underwent in the last decade a profound “transformation” which finds expression in the supposedly radical change in distribution of property and national income, and, also, in the management of enterprises. Bourgeois apologists explain these changes in the following manner: In the realm of the distribution of wealth there occurred the so-called “diffusion of property;” because of the wide dissemination of petty stocks, ownership of enterprise was concentrated in the hands of a large mass of the population. Bourgeois authors often picture this distribution of petty stocks as “the democratization of stockholding capital.” In the realm of the management of enterprises, according to the assertions of bourgeois authors, a so-called “managerial revolution” took place; the essence of this revolution is that the direction of enterprises is handed to hired administrators — directors — i.e., to managers. The capitalist class according to this version, is removed from direct and active participation in the functioning of enterprises. These versions of the theories of the “democratization of capital” and of the “managerial revolution” are supplemented with the myth of the so-called “revolution of returns.” This signifies a supposedly substantial rise in the share (of the groups) of low income earners in the whole sum of national income. Such are the inventions of bourgeois apologists about the social advances in bourgeois society.

All these fabrications bear the stamp of the crisis of bourgeois political economy. They represent the generation of the death of capitalism, for many bourgeois ideologists do not risk an open defense of the capitalist system. Throughout all the aforementioned apologetic theories the prevalent idea is that the capitalist class has supposedly lost its former role, that it is no longer the chief proprietor of the means of production, that it no longer performs the management of enterprises and, finally, that it appropriates a greatly reduced part of the national income.

These are the principal traits of the crisis of contemporary bourgeois political economy. They prove that their crisis is not simply a reformation of bourgeois political-economic science such as has taken place in the past — as, for instance, the one that followed the publication of Marx's “Capital” in the seventies of the 19th century, when such schools of political economy as the Austrian, Lausanne, Cambridge and young historical school, etc., appeared — but rather a reformation which itself bears a profound contradiction characteristic of dying capitalism. This is not simply a defense of the bourgeois order; rather, it is an apology which includes within it the forced avowal of the internal weakness of capitalist economics and which seeks the source of the might and prosperity of capitalist economics not within these economics but from outside, extra-economic forces — an apology which deems that the successful development of capitalist economics depends on the course of economic policy which the bourgeois government takes. In praising capitalist economics, contemporary bourgeois apologists are forced to give forth its testamentum paupertatis at the same time. They are obliged to recognize that it suffers from various old-age diseases, and needs artificial invigoration, a singular “overhaul,” with the help of an injection into the national economy of enormous sums from the government's budget.

The internal contradictions of bourgeois apologetics today can also be seen in the bourgeois economists' inability to defend capitalism in as absolute a form as before and to ignore completely the contradictions.

One may speak therefore of the crisis of bourgeois ideology as of a crisis which does not consist in the denial of bourgeois ideas but which shows the inability of present-day writers to defend these ideas with any consistency. This inability is generated by the state of the contemporary bourgeoisie which has been brought up through the course of historical development to approaching catastrophe and seeks to find a miracle which alone may heal the mortally ill capitalist economics.

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The rapid strengthening and development of the socialist economic system in the world, its great advantages over the system of capitalism, exerts an enormous influence upon all aspects of social reality in capitalist countries, particularly upon the ideological sphere. Marxist-Leninist ideas are increasingly disseminated among the working masses of the entire world. Simultaneously, the crisis of bourgeois ideology becomes progressively deeper. One of the most important manifestations of this is the crisis of bourgeois political economy.

FOOTNOTES

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A. Rubinshtein:

What Is Behind the Reformist "Theories" of a Second Industrial Revolution

The economic views of the reformists have always been based on the conjunction of two principal premises These are: The "theories" of the automatic self-determined growth of capitalism into socialism, and the "theories" of a bourgeois state beyond class considerations which regulates capitalist economy and strives for its harmonious development.

In recent years bourgeois economists have introduced the new conception of a "second industrial revolution" — a term which the reformists were quick to employ The essence of this concept lies in the juxtaposition of two historical events fundamentally different from one another in respect to their nature and significance, namely, the industrial revolution which took place in England at the end of the 18th and during the beginning of the 19th centuries and developed later in other countries, and the presently occurring technological revolution (automation of industry, electronics, use of atomic energy for peaceful purposes, et al.). This analogy, however, is completely invalid. In the first place, the results of the first industrial revolution were limited by narrow, strongly delineated historical frames; secondly, modern technological advances do not create an adequate technological basis, such as existed at the time of the first industrial revolution, for a new mode of production to grow from the old feudal social system. Although narrow in scope, the technological revolution presently taking place in capitalist countries is in great measure making acute all the contradictions of present-day capitalism. If, in the next few years, automation of production involves entire branches of industry in capitalist countries, and if the application of atomic energy is introduced at a more rapid rate, then great difficulties in marketing products as well as colossal unemployment are inescapable. The technological revolution in capitalist countries meets many insurmountable obstacles, and, also, it affects very deeply the most vital interests of millions of people. No wonder then that certain American bourgeois economists deem that in such event tens of millions may lose their jobs in the USA alone. Such a "perspective" challenges the existence in the future of the capitalist system itself.

It is, therefore, natural that the problems linked with the technological revolution occupy a central spot in the attention of bourgeois and right-wing socialist economic literature. The subjects most discussed are 1) the character, direction and tempo of the technological revolution, 2) its influence upon the concentration of industry and upon the average levels of the population and of the working class and, finally, 3) the technological revolution as an aspect of the struggle against the USSR and the people's democracies.

The representatives of all the trends of contemporary bourgeois and reformist economic thought, ranging from neo-liberals and neo-classicists of various denomination to Keynesians and other partisans of government regulation and of the theory of so-called "mixed economy," are involved in the discussion of the problems vitally important for the existence of capitalism. The apologists of capitalism of all currents strive to prove that the combination — in a certain proportion — of government intervention with the free course of economic factors will guarantee the realization of the technological revolution in the interest of all levels of the population.

These problems are not discussed in serious economic debates and publications alone. They appear on the pages of the "yellow" popular bourgeois press where absurd dissertations on the complete replacement of man-power in industry by robots — the "revolution of robots," etc. — are found.

The theoreticians of right socialism also take a quite active part in the discussion of the technological revolution. They assure the workers that for the first time in the history of mankind it becomes possible to overcome poverty and famine in the whole world. Their interest in the technological revolution increases because many labor unions and other workers' organizations in the USA, England, and France must engage in bitter struggle with capitalists concerning the consequences of this revolution that are detrimental to the proletariat (mass dismissals of workers, increased intensity of labor, etc.). Because of this state of affairs, the revisionist leaders and theoreticians cannot shy away from evaluating the existing situation.

In connection with this, new forms of capitalist apologetics appear in the arsenal of ideological armaments. A new term is coined proclaiming the transfiguration of capitalistic technology and economy, simultaneously, — the "second industrial revolution."

We have before us the texts of several reports on this subject made before the conventions of two right-wing socialist parties in 1956 — German (Karlo Schmidt, "Man and Society in the Age of Atomic Energy") and Austrian (Hans Beyer, "The Century...of the Second Industrial Revolution"), etc. These two parties, although both inferior in membership to the English Labor Party, for example, are nevertheless considered, according to an established tradition, the principal purveyors of "theoretic" weapons for the Socialist International. Besides, many other articles on the same subject are published in various journals and newspapers of the right socialist wing.

"The surest sign of our being in a revolutionary phase," writes K. Schmidt, as he examines contemporary technological advances, "is the fact that the equations which only yesterday enabled us to recognize our time are no longer true." (1) The secret of this, he indicates, lies not only in the new improvements of technology but also in new and "revolutionary" aspects of industry. A mutation, rather than an evolution, is taking place. Schmidt speaks of qualitative changes not only in technology, but in economics and politics as well. "The introduction of atomic energy," Schmidt stresses, "allows for the liberation of heavy industry from proximity to coal sources... This is not simply a change in conditions of industrial production, rather, this is a revolution which will change the world." (2)

Schmidt abuses the term revolution and borrowing the word "mutation" from the lexicon of natural sciences, he wishes to create an intentionally unclear and vague picture of advances which allegedly have radically changed the character of "our entire present life" and of contemporary capitalism. Schmidt makes use of this terminology in order to create a particular "smoke screen" under the cover of which the revolution in technology becomes, according to him, a revolution in ecomics, and capitalism — an order in a state of transition to socialism.

The reformists examine the whole history of the development of capitalism in the light of this newly concocted "theory" of the second industrial revolution. According to Schmidt, it is divided into three periods: 1) the industrial revolution of the 18th and 19th centuries, 2) a "transitional period," which extends from the end of the 19th century to the present, and 3) the period of "the second industrial revolution."

Although the real course of history does not in the least reflect the truth of such "periodization," yet, this division has been extremely useful to the reformists. This scheme does not include either imperialism or the general crisis of capitalism; the entire history of capitalism is reduced to two technological upheavals and the "transitional" period connecting them.

On the other hand, Schmidt, as well as the other reformists, does not spare words in his description of the consequences of the first industrial revolution. Naturally, he is dealing here with the past. He boldly appeals to Marx and Engels. "No one has depicted the characteristic symptoms of the first industrial revolution better than the two dioscuri, Karl Marx and F. Engels, in the Communist Manifesto," (3) Schmidt writes. He speaks in very sharp tones about the upheaval which occurred then in the factors of production, the alienation of man, the impoverishment of the proletariat and about the degradation of human dignity. The class irreconciliability of Schmidt, when he is concerned with events which occurred a hundred and fifty years ago, is beyond doubt.

Marx foresaw the stratagems of the apologists of capitalism when he spoke of "the initial accumulation of capital." He made several stringent remarks about the bourgeois historians who closed their eyes upon the contradictions and calamities of their own time while they were able to recognize and were inflamed by mediaeval horrors. "To be 'liberal' at the expense of the Middle Ages is too easy," (4) Marx wrote. This observation directly touches Schmidt, for the closer he comes to dealing with present capitalist reality, the weaker his "critical" spirit grows.

Paying no heed to facts, K. Schmidt attempts to prove that during the period of imperialism and, more particularly, after the First World War, the development of capitalism supposedly assumed a new character, favorable to the worker. According to him, the working masses for the first time forced the government to use its power to intervene in the interest of the proletariat so as to create "a sphere of socially determined politics and economy."

As we can see, this is the old "theory" — well-known since he days of Bernstein — of organized capitalism within which a nucleus of socialism is peacefully maturing. This theory, along with its variants, was smashed long ago by Lenin and the revolutionary Marxists and was repeatedly demolished during the struggle against Mensheviks, revisionists, and Kautskyites. This scheme stands in complete contradiction to the facts of capitalist reality, when monopolistic capital increases its exploitation of the working masses and continues to infringe upon their standard of living.

H. Beyer notes that a number of "prerequisites" is needed before the introduction of automation into manufacturing, and, especially, before the application of atomic energy for peaceful aims are possible. The automation of industry is connected with a great rise in the volume of production and may take place only under conditions of tremendously increased production and market outlet for goods which cannot be satisfied under capitalism. The American experiment is an especially striking illustration of this.

Beyer examines technological progress in light of such a actor of industry as labor. He is thus forced to stress even more the contradictory nature of capitalism. He sees, for nstance, that the technological revolution engenders frightening unemployment. On the other hand, this revolution is impeded by he lack of technically trained cadres and highly qualified ngineers and technicians which are needed in the newly automated industry. Finally, a decisive condition is the stability of he market without which mass industry cannot exist. This con- ition, Beyer recognizes, is still missing. In the end, he comes the following lamentable conclusion: "This gigantic industrial revolution is characterized by the social tragedy inherent ithin it." (5) Beyer criticizes, also, the apologetic theory of compensation," hitherto popular among bourgeois economists nd reformists. According to this theory, technological prog- ess which leads to the "expulsion" of workers from certain ranches of industry, simultaneously, or nearly simultaneously, reates a compensating demand for labor in its other branches nd this supposedly liquidates the unemployment problem.

Beyer notices yet another side of the same social tragedy. He speaking of "an uncontrollable increase in the power of nancial capital." "Imagine," he remarks ironically, "that a artian were to ask 'How are things going on Earth?' We would answer, 'We have great troubles. The industrial revolution has taken place. We are now able to produce ten times as much as before and at the same expense. This is dreadful.' The man from Mars would shake his head and say, 'This I cannot understand. If you are able to produce more and better, then what are you afraid of?'"

As other reformists, Beyer quotes in his introduction many facts which characterize the negative side of technological progress under the conditions of capitalism. They, after all, addressed themselves to workers, and this implies an obligation. Yet, in examining this data, Beyer in no way differs in principle from the bourgeois economists. Beyer had visited automated factories, studied statistics, economic research findings and trade union publications in order to prepare his report, but still he was unable to notice the profound contradiction of the present-day technological revolution in capitalist nations and the very heavy social calamities it has effected in them. He did, however, establish that it is marked by "inner tragedy." But rejecting the only scientific theory — revolutionary Marxism — he stands with both feet planted on the ground of vulgar contemporary bourgeois political economy. He is unable to look more deeply and establish that the "tragedy" is intrinsically connected with the essence of capitalism in general, with capitalism of the imperialist period and, more particularly, with the crisis of capitalism. He is unable to see that only a proletarian revolution and a revolutionary change of capitalism into socialism relieve this "tragedy."

What then, Beyer seeks to find a reason, has generated this "tragedy"? "The trouble," he says, "does not lie in technology, but rather in the economic constitution which cannot follow the pace of technological progress."

Thus, Beyer agrees that the "trouble" is not to be found in technology, but in "economic," that is to say, in social causes. Yet, here, also, and far from accidentally, he makes use of a specially coined word — "economic constitution" ("Wirtschaftsverfassung"). The objective laws of the development of the capitalist social formation are not to blame, no, but rather the "constitution." By introducing this term, Beyer comes to deduce what he wishes, namely, that the "economic constitution" which stands in the way of technological progress may be altered without a revolutionary transition to a new social order (in the same way that the constitutions of bourgeois governments change). These changes are to occur peacefully, in an evolutionary manner by means of the addition of new "articles" or amendments to those that already exist.

This is how a reformist theoretician resolves the problem of "tragedy." Besides, Beyer also examines this question from an economic viewpoint. Here, he says, "the old contradiction between technology and 'economy' arises again." Internal conformity to some established law is supposedly inherent in technology, determining the direction taken both by technological development and by the level which it reaches. These internal conformities of technological development "clash" with the laws of "market economy." As a result of this, possible technological progress is delayed. On the other hand, spurred by competition, the individual capitalist introduces new technological improvements, thereby increasing production without a guaranteed market. The total result — an excessive development of single branches, unemployment, crisis, and depression.

Contemporary apologists of capitalism know that it is now impossible to conceal the tragic contradictions of reality because they are felt by millions of working people. Nevertheless, it is possible to try to tear these contradictions away from the basic laws of the laws of capitalism, of imperialism, and of the whole crisis of capitalism. According to them, various ways exist to overcome the "destructive" market element. This can be accomplished first of all by monopolies themselves. Beyer, for instance, feels that in the United States the problem is dealt with precisely in this way. Large monopolies work out patterns and standards of production and simply impose them upon other enterprises.

The reformist theoreticians do not exclude the possibility of organizing the economy along this line. Setting off monopolies against competition, they picture methods of monopolistic pressure upon outsiders, methods of subordinating monopolistic capital under their rule (i.e., in this case, the imposition upon outsiders of standards and patterns of production) as the solution to the market problem and as a way to organize the economy. It is the reformist's belief that monopolies can organize the economy and overcome the obstacles standing in the path of technological progress. Hitherto, the market economy "was not capable of averting crises and depressions" precisely because, Beyer assures us, "cartelization had not yet developed as it has today." (6)

Yet, even Beyer does not go so far as to assert that such an economy, "organized" by monopolies, would provide for total employment, assure the rise of the living standard, etc. These problems are to be resolved, in his opinion, by the additional intervention of a "democratic" bourgeois government: "The organization of the economy by government can change the technological revolution into a social one." (7)

"Will the cartels direct and control, or will this function belong to the democratic government?" asks K. Schmidt. He concludes saying, "the cartels are there already. The time has come for governments and parliaments to act." (8)

Government "intervention," however, appears in reformist theories today in a manner quite different from that of a few years ago, and far more modestly than in the old theories of "socialization."

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A subject of discussion prevalent in bourgeois economic literature is to what extent government regulation over economic life is desirable. The manner in which this problem is resolved, in fact, determines one's affiliation with one or another of the various schools of neo-Keynesians, neo-liberals, neo-classicists, etc. In recent years, because of some amelioration in the state of economy, the position of those who favor moderate control or mixed economy has become notably stronger among bourgeois economists and reformists. The center of gravity has moved to a position of compromise between free market and government regulation.

Faithful to the most recent bourgeois mode, the reformists are keenly sensitive in their reaction to every change that occurs in the general economic picture. As soon as the situation grew worse at the end of 1956 and in 1957, for example, propaganda for government intervention was added to the theory of the second industrial revolution. In the second half of 1957, the reformist press began to stress the importance of government in regulating economic life. Those forms of government capitalism which the reformists now advocate, however, are substantially different from even their own theories of "socialization" of the Twenties and from their post-war plans of nationalization.

The projects of socialization after the First World War were a maneuver to deceive the working masses. There were planned in order to gain time, a factor indispensable to the bourgeoisie that they might foil the revolutionary pressure of the proletariat and strengthen the capitalistic apparatus of oppression. The extensive plans of social-democratic socialization then remained, as we well know, on paper only.

During the years that immediately followed the Second World War, some branches of industry in certain countries were nationalized because of direct pressure from the working class with the participation of its revolutionary Communist sections (as in France). Yet, even in those countries the monopolists were able, with the help of the reformists, to preserve their interests and gradually remove the Communists from the leadership of nationalized industry. In other countries, where only reformists directed nationalization, this process was from the very beginning in tune with the interests of monopoly capital (in England, for instance). Today, while a certain animation is present on the over-all economic scene, the leading monopolistic circles are not disposed to agree to the nationalization of new branches of industry, even if fully satisfactory compensation is offered. They do not object in the least, however, against other forms of government intervention and various kinds of government subsidy which enhance the growth of monopolistic profits. Bourgeois economists, and following them, the reformists, obedient to the will of capital, have come to the defense of these forms which are beneficial to monopolies.

The reformists have done on their side all they could to discredit the idea of nationalization of the means of production themselves in the eyes of the workers. In England, for instance, the Laborite Government nationalized, during the period 1945-1951, several branches of industry, the transportation system, and the Bank of England. In 1954, 23.5% of the total number of workers and employees in Great Britain were working in nationalized industry, trade and government offices. Today, however, the critical appraisal the British Communist Party and its press directed against this nationalization at the time it occurred has undeniably been proved just. The critique of the Communist Party had repeatedly shown that this nationalization was fully in correspondence with the interests of the English financial oligarchy (e.g., the choice of particular branches, huge compensations to former owners, trust of the management of newly nationalized industry to representatives of the financial oligarchy, etc.). In fact, what was happening was that the modernization and technological reconstruction of English capitalist industry were accomplished at the taxpayer's expense.

As it is well known, the Conservative Government denationalized, when it came into power, the ferrous metallurgical industry, into which more than 300 million pounds of government funds were invested. This was accomplished under conditions very favorable to capitalists without any particular opposition from Laborist leaders.

The English journal "Statist" of January 5, 1957, noted in marking the tenth anniversary of nationalization that "it [nationalization] did not satisfy the majority of expectations, and especially, not those concerning improvement in labor-management relations." A West German trade union journal was similarly forced to observe that in order to "avoid a communistic structure," the Laborists "had made the pendulum swing too far in the opposite direction in organizing nationalized industry." The result was something too closely resembling the "incorporation of large concerns."

The president of the administration created by the Labor Government for the nationalized coal industry, James Bowman, clearly indicates, in a book published by this administration for the tenth anniversary of the nationalization of this branch, that the number of labor conflicts not only did not decrease, but actually rose considerably and still continues to rise. Another member of this administration, William Sayles, concludes: "The sum of good will which sprung up as a result of the law of nationalization has almost disappeared... Unless there is some large and invigorating new element, it may soon vanish entirely."

The Laborite Crossman draws the following general conclusion in his book: "Neither the workers nor the voters feel particularly positive toward nationalization." (9) When they prepare documents for the new party programme, the Laborists cannot fail to take into account the negative attitude of monopolists toward extensive projects of further nationalization.

The programme committee of the Labor Party, which consists of leaders of various factions (Gaitskell, Bevan, Wilson), recently published two pamphlets concerning the problems of nationalization. Together with a brochure that already appeared in 1956, "The Way to Equality," and another paper especially dealing with planning projected for 1958, these booklets will constitute the economic programme of the British Labor Party. Laborist leaders strive to assert that the nationalization which they had effected during the period 1945-1951 has proved to be beneficial both to the national economy and to the immediate interests of the working class. Yet, though they declare the success of their nationalization programme in the above mentioned publications, the Labor Party leaders in fact announce a retreat along the entire front. First of all, they emphatically stress the diversity of forms of government intervention in economy. They consider that modern capitalist economy is subdivided into many sectors and deem the "sector of large enterprises" alone a possible object of nationalization. They assure us that only the nationalization of enterprises where the function of the capitalist has been assumed by hired management will have a beneficial result. In the sector of smaller concerns, the capitalists still supposedly have brilliant perspectives for a considerable length of time. The term "large enterprise," however, is very vague. Many small enterprises are, as the Laborists themselves indicate, but filial branches of large companies (out of 280,000 small, joint stock companies, 50,000 do not even conceal this fact). But the Laborists have no intention whatsoever to nationalize all large industry, not even its more important branches. The authors of the brochures insist upon the principle that only those branches of industry which cannot, for one reason or another, satisfy a proper level of production while privately owned, are to be nationalized. In the meantime, the application of this principle has already given lamentable results. The buying back at "market value" of enterprises and branches of industry standing on the verge of bankruptcy during 1945-1951 resulted, in fact, in the enrichment of their owners at the expense of taxpayers, especially since the market price for stocks of such enterprises quickly rose in anticipation of a foreknown nationalization. The authors of these pamphlets offer a carefully elaborated system to check the productivity of industrial branches in order to decide their future. Yet, they already express their confidence in large firms. "On the whole, large firms serve well the interests of the country" — they write, repeating many times this adulatory view. Thus, the greater part of large industry is also exempt from the nationalization projected in the event that the Laborists return to power.

In essence, the Laborists promise to return to state-ownership only those branches of industry which the Conservative Government denationalized (ferrous metallurgy and long distance auto-transportation). They conclude their programme by raising the question of government control. The gist of this matter, they write, consists in the establishment of government control; very often, there is no necessity in such case for the nationalization of separate enterprises. It is enough for the government to obtain ownership of a part of the stocks of an enterprise subject to control. The Laborists have a concrete and thoroughly "practical" plan to conduct this operation. It is merely necessary to settle the payment of succession and other taxes with stocks and bonds, and, also, to use the idle sums of the pension fund in order to purchase valuable issues. German reformists have already coined a catch word for this operation. The government will "buy its way into" (sich einkaufen) capitalist industry.

Finally, the authors of the brochures feel that "control" may take effect without any "socialization," but merely by way of a proper government policy of price regulation, investment, tariff, etc.

Thus, the plans for "the establishment of socialism," "wide nationalization," "guarantee of equality, freedom, and justice," etc., are in the final analysis equivalent to the ordinary bourgeois programme of developing a "mixed economy" and "government regulation." One principle, however, is invariably constant in all the variants of Labor Party planning: The principle of "just compensation" of the value of property belonging to capitalists "without any discrimination." There is no doubt then that any governmentalization which the Laborists project to undertake will in no way infringe upon the interests of monopolists.

Gerhard Beisser, a theoretician and publicist of West German social-democracy, who often offers a commentary on programme documents, makes a clean break with nationalization under pretense of a struggle with the "obsolete" theory of "complete socialization." (10) His articles could be used as a "theoretical" commentary on the new programme of the English Labor Party.

Beisser calls for the rejection of all projects of extensive nationalization which would lead to the establishment of a "centralized system of economic administration," which he finds so loathsome. All-around nationalization, which encompasses whole branches of industry, Beisser indicates, shuts the access of private capital to nationalized industries and hinders its free use and application. Beisser is particularly indignant over the fact that previous social-democratic programmes have linked "socialization" with "the expropriation of the expropriators," and with the abolition of capitalist ownership of industry. He simply does not see the necessity to have recourse to such measures since ownership today is "limited a thousand ways" as it is, and is "socially directed" by the constitutions of bourgeois governments.

In answer to criticism from Communists, the reformists attempt to depict them as being opposed on principle to the nationalization of industry in capitalist countries.

Communists, however, are not enemies in principle of all nationalization under conditions of the capitalist mode of production nor are they at all in favor of denationalization as the reformists often picture them. V. I. Lenin repeatedly pointed out that state capitalism marks a new, positive step on the path of the preparation of the ground for socialism. Communists support the development of state industry in bourgeois countries recently liberated from colonial dependence (India, Burma, Egypt, etc.). Nationalization of enterprises corresponds to the interests of the proletariat in imperialist countries as well, provided it is inseparably linked to the struggle against monopoly capital. Nationalized, or simply government-owned, enterprises may become points of departure for socialist construction after the victory of the proletarian revolution. Several Communist Parties consequently include in their programmes demands for nationalization, indicating, however, that its application be accomplished by other measures directed against the magnates of financial capital.

The substance of reformist apologetics reveals itself in that its advocates consider all cats grey. Atomic plants built by the American government at the expense of taxpayers and exploited by monopolies, and concerns which governments set up today in former colonial and semi-colonial countries, etc., are deemed equally "social."

The right-wing trade union leaders draw corresponding practical conclusions from this. "The struggle of the proletariat against technological rationalization," writes B. Reinchenbach in a journal of West German trade unions, "becomes the more meaningless (gegenstandlos), the quicker modern development (automation.—A.R.) takes place in socio-economic forms." (11)

Thus, it is enough that some "socio-economic form of regulation" appear, for the struggle of the workers against the consequence of capitalist technological rationalization to become "meaningless." In reality, the position of groups of the monopolist bourgeoisie concerning this question is determined, naturally, not by the interests of a "whole social economy" or other fabricated reformist ideas, but rather by the pursuit of monopoly profits. The imperialist bourgeoisie is being pushed toward recognition of the necessity for state intervention by such factors as the exacerbation of class contradictions, the struggle to transform the world, the downfall of the colonial system, etc.

Today there are not, nor can there be, any liberals of the "Manchester" type. The question at hand deals with the forms, limits and character of government intervention. This is where the interests of various monopolist groups differ, and this in turn is the reason why the views of professors who are in the service of monopolies also differ.

The Austrian Chamber of Commerce, whose leaders, according to the reformists, belong to the ranks of neo-liberals and opponents of government intervention, recently conducted a poll among entrepreneurs. The latter were asked about the desirability of government "intrusion" into economic life. The results of this survey delighted the newspaper "Arbeiter Zeitung," central organ of Austrian socialists. An overwhelming majority of the capitalists polled emphatically pronounced themselves for "government intrusion." Commentaries are superfluous. If government intervention, so greatly welcomed by capitalists, promised anything adverse to them, it is doubtful that the results of this enquiry would have been so unanimous. On the other hand, if this overwhelming majority of entrepreneurs comes out in favor of government intervention, is this not the best evidence of the perversity of the reformists' assurance of the "extra-class character" of this intervention?

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After they have established that there supposedly are forces organizing the capitalist economy and that the "democratic" bourgeois government is prepared to use for this purpose all available means, etc., the "theoreticians" of reformism feel completely free to solve all the problems created by the technological revolution. They intend to resolve them according to the old opportunistic recipe, i.e., by the removal of the "bad" aspects and by the development, with the help of government and society, of the "good" aspects of the technological revolution.

In his polemic with Proudhon, Marx had already characterized such "theoretical action." "According to Mr. Proudhon," he wrote, "every economic phase has two sides: a good and an evil one. He examines economic categories just as a petty bourgeois examines historical figures... The resolution of a particular problem lies in keeping the good side, while removing the evil." (12)

The reformists, like the bourgeois economists, promise the realization of the technological revolution under capitalism without concentration of production, but rather with the preservation and even strengthening of the position of small and medium-sized enterprises. Thus, a certain Pass affirms in a West German social-democratic journal that the rise of atomic energy will result in decentralization in manufacturing industries. "This would mean," he writes, "that a great number of small and very small entrepreneurs would participate in future times, as well as now, in determining the face of society and its economic, social, and political structure."

The French right-wing socialist, Jules Moch, writes with even greater determination about the perspective of "deconcentration" as the result of the present-day technological revolution. However, neither Jules Moch, nor Pass, nor any other "theoretician" of decentralization, has produced or has been able to produce any factual data in support of the perspective they indicate. All the newly issued figures, on the contrary, support again and again the attitude of V. I. Lenin and of the revolutionary Marxists toward this question.

In 1957, for instance, the 13th issue of the "Labor Fact Book," a semi-annual publication, published in the USA by the Labor Research Association, appeared. According to the data presented by this association, 50% of the total gross production belonged to the 500 largest American corporations. About 50% of the total labor force was employed by them, and these corporations received up to 68% of the total profit. Furthermore, in 1955, aggregate assets increased 13% and constituted 59% of all industrial assets for that year. The specific gravity of this summit of monopoly capital is not decreasing in the least. On the contrary, the share of the 200 largest companies in the general extent of production of manufacturing industry increased from 37.5% in 1950, to 40.5% in 1953, and 45.5% in 1955.

After an examination of the results of the development of technology and the economy during the past thirty years, the authors of the brochure "Industry and Society" were forced to recognize the presence in modern industry of a "strong and permanent tendency toward impoverishment" (although they accompany this admission with various reservations). This conclusion is supported by numerous facts. The authors of the pamphlet indicate that in England there is a total of 291,000 registered corporations; 280,000 of these are the so-called private companies, which, by law, have not more than 50 shareholders, and their shares are not sold on the market. There are only 11,000 larger, "public" companies. During the postwar period, the number of the former companies had risen by 100,000, whereas the number of the latter decreased by 2,000.

J. Moch would quickly conclude that this illustrates the process of "deconcentration." The authors of the booklet, however, cautiously note that "it is difficult to say whether this is really evidence of the birth of new enterprises, or whether this is an indication of the consolidation of small, singly-owned firms into stock companies."

The unilateral success of large firms and its connection with new technological tendencies, with the appearance of new branches of industry and with the wide expansion of mass industry, does not create any doubt in the minds of the authors.

The shareholding capital of all the private companies constitutes a total of 2.471 billion pounds. While the capital of "public" companies amounts to 4.340 billion pounds. One must also remember that over 50,000 "private" companies are but filial branches of the "public" giant companies.

The figures of tax agencies are even more indicative; 82% of the property of stock companies which is taxable belongs to the "public" companies and only 20% to the "private."

Out of 11,000 "public" companies, six or seven thousand whose shares are not quoted on the stock exchange must be singled out. These are comparatively small enterprises whose average paid capital constitutes approximately 140,000 pounds. The remaining 3,000 firms possess 43% of the joint-stock capital, employ 46% of the labor force, and earn over 60% of the gross profits of this entire group of companies. And, finally, in this sector towers the very small group of 512 giant enterprises, each of which has assets above 2.5 million. This group, according to data of the National Institute of Social and Economic Research, gains more than 50% of the industrial profits.

"In all industrial countries...the large firm has shown itself to be a decisive institution," the authors of the booklet conclude. The large corporation determines economic policy, fixes the type rates of wages and makes decisions as to the building of new works and factories and the restoration of old ones.

The authors of the Laborist brochures thus recognize the growing and strengthening domination of the magnates of large industry. They avoid only the deductions which necessarily follow from these facts about the omnipotence of monopolies and rule of the financial oligarchy.

Similar data from all countries of the capitalist world could be brought forth. But how can facts convince the average bourgeois philistine who is always ready to agree that "perhaps this is true now, but if 'society' so wishes, everything will change." Inevitably, one is reminded of such knights of subjective sociology as V. V. or Krivenko, who strove to prove in debates with Lenin and Plekhanov that it is merely necessary for "society" to desire so, and Russia will change from the capitalist path to the path of "national industry."

In other instances, the reformists are even ready to admit that in present-day "mixed" economy the leading role is played by monopolies and the financial oligarchy. This admission is made, for example, by Abendrot, a constant collaborator of the West German social-democratic journals. He, however, feels that the adoption of new technology is tied up with such huge investments of capital that are beyond the means even of the large monopolies. Monopoly capital, in Abendrot's opinion, has placed itself in an absurd position in that it was unable to accomplish at its own expense the scientific research necessary for technological improvement and was forced to "use the government for this work." Abendrot realized that monopoly capital was capable, in spite of this, of appropriating the results of this research conducted at government expense.(13) This does not embarrass this "theoretician" in the least, however. It happened thus, and could have happened otherwise, he reasons. He wishes to convince "society" to do away with the "absurd" position and direct social development "along another path."

In reality, the monopolists bring many things "to the absurd," daily, hourly, and, in general, when they use the capitalist state in their own interest, in the most various ways. "Absurd" — is the fact that the representatives of monopolies have government positions whence they direct all the affairs of "democratic" states. "Absurd," also, is the domination of a clique of financial magnates over the greatly enlarged social forces of production. Yet, the liquidation of this "absurdity", obvious to many millions of people already, is possible only through a proletarian revolution. Clever "separation" of "bad" elements of development from "good" ones will help nothing.

The extreme sparseness and limitation of demands for the satisfaction — in part at least — of the working class' interests are truly amazing in the context of the manifold reformist projects of "annihilating evil" and "furthering good." The concluding section of the already quoted report of K. Schmidt is most typical in this respect. "Many think" he says, "that the economy can be democratized today, be means of laws which would guarantee sufficient control and their [the workers'] participation in leadership [mitbestimmung]. I feel that at the present time this is an illusion. There are not yet enough educated people in the circles of the labor movement who are sufficiently cultivated to be able to assume this leadership successfully."(14)

Magnificent acknowledgement! In the revolutionary days which followed the First World War the reformists promised "socialization" to the German workers. The 40th anniversary of these unfulfilled promises can soon be celebrated! For decades, right-wing socialists have proclaimed "democratization of the economy" and the "gradual realization of socialism." And this is the result! It is suddenly discovered that, particularly, the German proletariat — one of the most cultivated detachments of the world proletariat, which has such a rich tradition of revolutionary struggle — is not yet "ready" to take over industry. And this statement is made while the working class of the German Democratic Republic is successfully running the entire national economy in the interests of socialism and while, by Schmidt's own admission, socialism is successfully built, and age-old backwardness is overcome by the peoples of China, Vietnam, and other countries which have broken from colonial and semi-colonial domination.

There are promoters and "theoreticians" of the labor movement who take upon themselves the initiation of a policy of freezing and even lowering wages in the interest of "the growth of industrial forces" and development of "the industrial revolution." A professor of political economy and a member of the British Labor Party, Arthur Levy, speaks precisely in this manner. "Our fathers", he writes, "never were concerned with economic progress. In those days this seemed to be an automatic affair." Yet, Levy stands on the level of "contemporary science" and knows the work of Keynes. "We know, however," he continues, "that for this economic progress it is necessary, besides, to have a high level of investment, which means that certain limits must be placed upon consumption."

Apparently, there exists a division of labor of a kind: If some reformists demand from society a fairer distribution of national production and an increase of wages in the name of the "industrial revolution", others, in the name of the same cause, are concerned with investments and with keeping wages on a low level.

"If the Party feels," Levy continues, "that the private sector of economic life must remain, and if it simultaneously desires that the standard of living increase rapidly, then we must rejoice when profits are high... Traditionally in our Party, one's heart beats faster when the word 'profit' is mentioned. The demand to keep wages on a low level in order to allow for large profits would have been considered a sacrilege. But since we, in fact, face such a situation, we must look at truth directly in the eyes."(15)

Is it even necessary to quote such a long passage to show the presence in the ranks of the social-democratic movement of "theoreticians" who have openly gone over to the side of the class enemy, to the side of the bourgeoisie? Is it surprising then that they strive with all their strength to undermine the united front of the working class and to break up its ranks in their struggle against the class enemy?

These gentlemen examine all the problems of the technological revolution as well as all the other problems confronting the contemporary labor movement from the point of view of a struggle between two rival world systems. They are always on the side of the West, ever opposed to the countries of the socialist camp. The technological revolution, itself, is acclaimed as a means of fortification of the West in its "struggle" with the East.

All the concrete problems of contemporary world-wide development are also examined from this point of view. F. Kreitzer, an Austrian reformist, recognizes, for example, that the USSR is surpassing the West in the tempo of its development. "This may bring it about," he writes, "that one nice day, the West will be left behind. The free world must therefore increase the tempo of the development of its industry. The socialist movement must take part in this and not allow that the Communists should ever surpass democratic countries in material production."(16)

There are, of course, many people among the social-democratic workers and among the functionaries of the social-democratic parties who do not concur in the least with such reactionary theories. Sometimes even their views penetrate onto the pages of social-democratic journals. But on the whole, the pages of these publications are filled with apologetics for capitalism.

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In 1957, socialism won several new, brilliant victories in its contest with capitalism.

The launching of two artificial earth satellites, the mastering of the production of inter-continental rockets, the building of an atomic-powered icebreaker, the creation of a gigantic synchrophasotron, as well as many other technological and scientific accomplishments of recent times are evidence the USSR is in the avant-garde of the technological revolution. They witness that the Soviet Union is at the head of this revolution, having surpassed the USA in many very important ways.

Uniting around itself the forces fighting for peace, the socialist camp, under the leadership of the USSR, levels to the ground all the attempts of the imperialists to unleash a new world war which would inescapably lead to tremendous waste of industrial forces and delay technological progress. Many scientists, economists, and publicists, as well as certain reformists, are forced to recognize these historical victories of the socialist countries. Even such a hater of the USSR as the Menshevik R. Abramovich not only recognized these successes, but, also, admitted that their principal basis is the social structure which exists in the Soviet Union. Yet, the leaders of the so-called Socialist International and the overwhelming majority of the official reformist "theoreticians" and publicists have kept their old positions. The right-wing mouthpieces and prophets of "the contemporary industrial revolution" stubbornly refuse to recognize that the advances — obvious to all — made by the Soviet Union and the other socialist countries constitute a triumph of revolutionary Marxism-Leninism.

On the contrary, news of the work done in setting down new programmes in various reformist parties appearing in the press indicates that the process of "liberation" from Marxist phraseology is continuing. Now more than ever before the characterization of reformism given by Lenin proves just: "...It has definitely ripened, over-ripened and rotted in several countries, having become completely fused with bourgeois politics..."(17)

The social-democratic professors in Hamburg, who in 1957, put out the second volume of their collective work, "Annual of Economic and Social Politics," openly call for the abandonment of all Marxist "left-overs" in the new programme.

In the Declaration of the Conference of Representatives of the Communist and Workers' Parties, which took place in Moscow, November 14-16, 1957, it is said:

"Contemporary revisionism attempts to smear the great teachings of Marxism-Leninism, declaring that it is 'outdated,' as having supposedly lost meaning in social development."

The congress of the Austrian Socialist Party, which recently took place in Salzburg, adopted a new project for a programme in which Marxist teachings are denied unequivocally. Such concepts as class and class struggle and the historical necessity for proletarian revolution and for the dictatorship of the proletariat in the change from capitalism to socialism are excluded from the projected programme. The authors of this project are filled with hatred for the USSR, for the people's democracies, for the national liberation movement in colonial or dependent countries and for the newly created sovereign, national governments. This programme declares that they are "mortal enemies of democratic socialism" and calls for a struggle against them in the form of "revolutions, civil wars, and, perhaps, foreign wars."

The programme committee of the Austrian Social-Democratic Party has no less decidedly divorced itself from "the completely obsolete" Lintz programme, etc. All this is concealed with beautiful phrases about "democratic-socialism."

As we can see, the reformist leaders react to the great victories of socialism with unconditional capitulation before bourgeois ideology.

FOOTNOTES

1. "Die Zukunft" No. 8, 1956, p. 211.
2. Ibid.
3. Ibid.
4. K. Marx, "Capital," vol. 1, 1954, p. 722.
5. "Die Zukunft" No. 1, 1957, p. 17.
6. "Die Zukunft" No. 2, 1957, pp. 49-50.
7. Ibid, p. 51.
8. "Die Zukunft" No. 8, 1956, p. 213.

9. "Die Zukunft" No. 10-11, p. 298.
10. "Die Neue Gesellschaft" No. 3, 1957, pp. 194-202.
11. "Gewerkschaftliche Monatshefte" No. 5, 1956, p. 309.
12. K. Marx, "The Poverty of Philosophy," 1956, p. 86.
13. "Die Neue Gesellschaft" No. 4, 1956, p. 288.
14. "Die Zukunft" No. 8, 1956, p. 213.
15. Note. As quoted by R. Pass in "Die Neue Gesellschaft" No. 4, 1956, p. 274.
16. "Die Zukunft" No. 5-6, 1956, p. 134.
17. V. I. Lenin, "Complete Works," vol. 22, p. 271.

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(Continued From Page 13)

of all countries entering the road to socialism, and the application of the various forms and methods of this contruction in different countries, represents a collective contribution to the theory of Marxism-Leninism. Analysis and generalization of the varied practical experience of socialist construction, the mutual advantage of this experience, is of great importance for the further success and strengthening of the unity of the world socialist economic system, for its victorious competition with the world system of capitalism. This imposes upon the economists of all socialist countries the obligation of serious activization of their work, and considerable strengthening of their mutual scientific ties.

Scientific Session of the Economists of Socialist Countries

At the end of November, 1957, a scientific session of economists of socialist countries was held in Moscow. Representatives of scientific organization attended from the following countries: the People's Republic of Albania, the People's Republic of Bulgaria, the Hungarian People's Republic, the Democratic Republic of Vietnam, the German Democratic Republic, the Chinese People's Republic, the Korean People's Democratic Republic, the Mongolian People's Republic, the Polish People's Republic, the Rumanian People's Republic, the Soviet Union and the Czechoslovak Republic.

The aim of this session was to discuss the urgent economic problems advanced by the development of the socialist system of world economy, and the practice of building socialism in the countries of people's democracy. In this connection the economists of the socialist countries prepared a collective work on "The Foundation and Development of the Socialist System of World Economy."

The idea of such a work was proposed and approved at a conference of the economic institutes of the socialist countries, which took place in November, 1956, in Warsaw. That conference made a decision on the preparation of a collective scientific work in which the formation and development of the socialist system of world economy would be presented and the most important problems of socialist economic development in different countries would be discussed. The Institute of Economics, U.S.S.R. Academy of Sciences, agreed to organize the publication of this work.

The economists of the socialist countries in the November, 1957, session, gave a great deal of attention to the problems of political economy which arose in connection with the preparation of the third edition of the textbook "Political Economy" in the U.S.S.R.

The participants of the session received copies of the book "The Foundation and Development of the Socialist System of World Economy," which is ready for publication, and also copies of the theses of the reports.

The conference was opened by corresponding member of the U.S.S.R. Academy of Sciences V. P. Dyachenko.

In the beginning, the conference heard the reports of Academician K. V. Ostrovitianov, "On the Contemporary Problems of mperialism and Socialism," (1) and of Doctor of Economics L. M. Gatovsky, "The General Laws and Special Features of the Construction of Socialism in Different Countries." (2)

The problems posed in the reports, as well as the materials being prepared for publication, evoked a vivid discussion.

Comrade Yui Kuan-yuan (the Chinese People's Republic) in his speech elucidated the principal problems of the economics of the transition period in the Chinese People's Republic, and also described the status and the problems of economics in that country. Comrade Yui Kuan-yuan stressed that the Chinese Revolution is following the path laid down by the October Revolution in Russia.

Of great significance in the successful reorganization of the economy of the Chinese People's Republic on socialist principles was the creative perception and application, by the Communist Party of China, of the historic experience of the Soviet Union in realizing socialism. This was done with proper consideration of the specific conditions in China.

Comrade Yui Kuan-yuan told about the successes of building the socialist economy in China during the years of people's power. In 1956 the problems of the socialist revolution in reorganizing the forms of ownership of the means of production were successfully solved in the Chinese People's Republic. By the end of 1956 more than 96% of all the peasant holdings were joined in agricultural cooperatives; out of this, some 88% formed cooperatives of a higher type. About 92% of all the handicraftsmen formed cooperatives. The overwhelming majority of private industrial enterprises passed under state control (99% of the number of workers employed, and 99.6% of the volume of production). In trade, 85.3% of all enterprises (in terms of employees) were transformed into state enterprises or cooperative and mixed enterprises (state and private).

Comrade Yui Kuan-yuan analyzed in detail certain factors that called forth the high tempo of socialist reorganization and economic development of the Chinese People's Republic during the transition period.

Because of the poor development of the capitalist relations in the Chinese village and the low level of labor productivity in the "kulak" economy, the capitalist road of development was not attractive to the Chinese peasantry. The peasants understood that without joining the cooperatives they could not get rid of their misery and improve their living conditions, could not secure the development of agricultural production. That is why the poorest peasants and the weaker middle peasants, who constituted the majority of the peasantry in the country, resolutely took the path of building socialism.

In the process of a long struggle with internal and external enemies, the Communist Party of China acquired enormous authority among the toiling peasantry of the country. This was helped in particular by the introduction by the Party organs of a consistent agrarian policy in the country-side.

The socialist reorganization in agriculture and the undermining of the roots of capitalism in the village had enormous significance for a successful reorganization of capitalist industry and trade.

After the victory of the people's power, the state took possession of the major part of the means of production used in manufacturing by nationalizing enterprises and banks belonging to comprador-bureaucratic capital.

Considering that the national bourgeoisie in China was comparatively weak, and also that it did take a certain part in the people's democratic revolution, the Communist Party of China applied methods of peaceful reorganization of capitalist industry and trade through the development of various forms of state-capitalism.

Now the capitalist sector in People's China is in a subordinate position, dependent on the socialist sector.

In pursuing its policy, the Communist Party is trying with great care to find the most effective forms, corresponding to the specific conditions of the moment, for the reorganization of agriculture, domestic cottage industry and capitalist industry and trade. Thus, considering the specific conditions in the country, the Communist Party of China found it possible to start cooperation in the villages even without the necessary machine-base in agriculture. Here is another example. The socialist reorganization of the village was started by the development of the lowest form of unification - by organizing mutual-aid teams, and cooperatives of a semi-socialist type, through which, later on, the peasantry was brought to higher forms of cooperation.

In the successful realization of socialist reorganization, an enormous role is played by the industrialization of the country. The stable basis of the Party's policy in industrializing People's China is the preferential development of heavy industry. The preferential development of heavy industry, along with the measures for improving the standard of living of the people, secured in many respects the decisive victory of socialist production relations in town and village.

Further, Comrade Yui Kuan-yuan pointed out that many problems, connected with the creation of the material base of socialism and the perfection of socialist production relations in the Chinese People's Republic, demand a thorough theoretical elaboration. In the scientific investigations of Chinese scholars, works in the field of economics occupy a prominent place. Studies are carried out on general problems of political economy, problems of the development of socialist economics, economics of various branches, the history of economic thought, problems of world economics, etc.

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(1) The basic theses of the report of Academician Ostovitianov were published in the magazine "Problems of Economics" No. II, 1957 (p. 103) in the report on the session of the Scientific Council of the Institute of Economics, U.S.S.R. Academy of Sciences

(2) The basic theses of the report of L. M. Gatovsky are included in his article, published in this issue of the journal.

One of the central tasks of the Chinese economic scholars is the struggle with right-wing bourgeois elements.

The representatives of the right-wing groups in economics, taking advantage of the campaign started by the Communist Party for improvement in the style of work, accused the Party and the government of People's China of lack of knowledge of the basic elements of economic theory and of inability to use the objective laws of economics. The right-wing elements declared that all the Marxist works of the Chinese economists are dogmatic. One of the representatives of the right-wing groups, Chien Jen-han, solemnized against Marxism from a Keynesian standpoint, and proposed to "supplement" Marxism by theses of the bourgeois economists.

In August-September, 1957, Chien Jen-han and his confederates were submitted to a criticism on the basis of principle and completely unmasked. The materials published in the Chinese press in connection with the criticism of the right-wing theses of Chien Jen-han had a great educational significance for the economists and the reading public.

In conclusion, Comrade Yui Kuan-yuan underlined that the profound investigations in the field of Marxist-Leninist economic theory urgently demand further collaboration of the economists of the socialist countries.

Professor B. Minz (Polish People's Republic) in his contribution first of all discussed the erroneous theses of some Polish economists, also noted in the report of Comrade Gatovsky.

Then Comrade Minz made some critical observations on the second edition of the textbook "Political Economy" (on the relation between the law of high monopoly profit and the law of average profit under imperialism, on the exaggerated stressing — in the opinion of Comrade Minz — of economic laws under socialism, etc.). Comrade Minz believes that the authors of the textbook present the section on "Socialism" on the basis of (as he put it) the "method of laws." As a result, declared Comrade Minz, the formulation of laws is sometimes substituted for a specific analysis of economic phenomena, categories, tendencies and counter-tendencies of social development. In the textbook references should be found to such important economic problems as the effectiveness of capital investments and new technique, the balance of the national economy, "the theory of economic growth" (tempo and conditions for the growth of the social product and national income), the theory of foreign trade, etc.

Many theses of political economy, said B. Minz, can be expressed quantitatively. In contemporary bourgeois economics mathematics is widely used, but it is used formalistically, mechanistically. Socialist economists, criticizing, quite correctly, the anti-scientific use of mathematical methods by bourgeois economists, nevertheless do not make sufficient use of mathematics for economic investigations.

As one of the possible spheres for utilizing mathematics in economics, Comrade Minz suggested the examination of the dynamics of the growth of production in the Departments I and II with the help of mathematical methods.

Then Comrade Minz declared that, in his opinion, it is not proved that under contemporary conditions the preferential growth of production of the means of production is a law. Lenin wrote about this law in the '90s, when the process of replacing living labor by machines was developing. Under contemporary conditions, thanks to technical progress, a tendency arises to decrease the expenditures of investments per unit of product. Therefore, in the opinion of Minz, one cannot consider as proved that the development of technique calls forth a more rapid growth of Department I.

B. Minz suggested arranging more frequent discussions among the economists of socialist countries on urgent problems of political economy, in particular on problems of reproduction, balances of the national economy, pricing, etc. In some cases such discussion should be arranged with the participation of the Marxist economists from capitalist countries. We need also to have discussions with the opponents of Marxism-Leninism, discussions with the bourgeois economists. The criticism of bourgeois theories should be more effective.

Overcoming revisionism, as the basic danger, and also of dogmatism, said B. Minz in conclusion, is the necessary condition for the further development of economics, as a creative and revolutionary science.

The speech of Comrade Yun Hen Diun (Korean People's Democratic Republic) was devoted to the peculiarities of the industrial development of the Korean People's Democratic Republic in the post-war period.

As a result of the war, forced on the Korean people by the American imperialists and their accomplices the Syngman Rhee clique, enormous damage was inflicted on the industry of the Republic. In 1953 the production of electric energy decreased to 26% of 1949; the volume of production of the fuel industry fell to 11% and metallurgy to 10%.

As the result of the successful fulfillment of the Three Year Plan of reconstruction and development of the national economy (1954-1956), the gross production of state and cooperative industry was twice as large as in 1949; the production of the means of production in 1956 was 1.7 times larger than in 1949, and the production of consumers goods 2.1 times larger.

In the process of reconstruction of the national economy, the socialist order was strengthened in the country. Thus, the share of state and cooperative industry in gross production of all industry increased from 90.7% in 1949 to 98.0% in 1956.

The restoration of the national economy of the Republic was accompanied by technical reconstruction and creation of new branches of industry. Thanks to the changes in the branch structure of industry it was possible to overcome to some extent the colonial deformity in the development of industrial production, characteristic for the period of Japanese imperialist domination.

The rapid growth of industry of the Korean People's Republic was possible because of the following favorable conditions: the presence of the rich natural raw-materials base; the presence of a certain level of industrial production, inherited from the past; the presence of cadres of qualified workers and specialists, trained during peacetime pre-war construction; the enormous selfless material and technical help of the fraternal socialist countries.

During 1954-1955 almost 81% of all capital investments were turned to the reconstruction of heavy industry. Paramount importance was given to the reconstruction of the machine-building industry and to the industry of building materials.

Our important task is, continued Comrade Yun Hen Diun, the rapid development of light industry and agriculture on the basis of the intensified growth of heavy industry. This is the means for solving the problem of satisfying the needs of the people in food-stuffs and wearing apparel, as well as housing. During 1954-1956, the annual average rate of development of light industry was about 28%. The rapid construction of agricultural production was secured by the development of cooperation and the technical re-equipment of agriculture.

The successful fulfillment of the Three Year Plan made it possible to lift considerably the standard of living of the country. The national income in 1956 was higher by 46% than in 1949. Real wages of workers and other employees also were higher than in the pre-war period.

Next Comrade Yun Hen Diun discussed the problems of the first Five-Year Plan (1957-1961) for the development of the national economy of the Korean People's Democratic Republic. Fulfillment of this plan, he said, will further strengthen the economic basis of socialism in the country and will allow a considerable improvement in the standard of living of the people.

The Party and the government will continue to stress the growth of heavy industry along with the development of light industry and agriculture. In the period of this Five-Year Plan agriculture will become completely cooperative (in September, 1957, 90% of all peasants' holdings were in cooperatives).

For the successful fulfillment of the tasks of the Five-Year Plan, it is necessary to supply the national economy with sufficient financial resources, to train a great number of specialists and qualified workers for industry and construction, to realize a more rational distribution of the productive forces, and to extend and strengthen economic and scientific-research cooperation with the countries of the socialist camp in accordance with

e developing international division of labor in the socialist
ystem of world economy.

Comrade Yun Hen Diun expressed his confidence that this
ession will promote the further sucessful working out of the
ost important problems of Marxist-Leninist economics and
e strengthening of cooperation between the economists of
e socialist countries.

Comrade V. Kaigl (Republic of Czechoslovakia) in his speech
uched upon some economic problems arising in connection
ith the developments of the socialist system of world economy.

To secure the final victory of socialism over capitalism on a
orld scale, said comrade Kaigl, it is necessary that the coun-
ies of the socialist camp surpass the most developed capital-
t countries, not only in the type of production relations, as
now the case, but also in the level of development of the
roductive forces. Consequently, the basic task of overtaking
d surpassing the most developed capitalist countries in per
pita production has to be solved not by the Soviet Union alone,
t also by the socialist camp as a whole. The socialist coun-
ies are solving this task not in isolation, but by united efforts,
rough the planned development and realization of the interna-
nal socialist division of labor.

Then comrade Kaigl discussed the role of the world socialist
arket. The world socialist market, he said, is the aggregate
the mutually advantageous commodity-money relations
veloping between the socialist countries and reflecting the
oduction relations, which join them. Consequently, the world
cialist market is the manifestation of the socialist system of
rld economy in the sphere of exchange.

As regards the problem of foreign trade, comrade Kaigl said
it in theory and practice one should proceed from the known
sis that foreign trade is a component part, a moment of
ended reproduction. Therefore, in preparing the plans of
ir national economy, the individual countries have to consider
eign trade as a component element of socialist extended
production. It is necessary to pass to a method of planning
which the proportions of the national economy are established
consideration of the international division of labor in the
ialist system of world economy.

Then comrade Kaigl touched on the principles of determining
ces on the world socialist market.

n conclusion, comrade Kaigl said that with the rise and
elopment of the socialist system of world economy, some
portant theoretical problems arose for Marxist-Leninist
nomics, and they have to be solved by the joint efforts of the
nomists of all socialist countries.

rofessor T. Chernokolev (People's Republic of Bulgaria)
cussed problems of socialist agricultural reconstruction in
transition period. Lenin's cooperative plan, and its real-
ion in the USSR, underlined comrade Chernokolev, showed
e toiling peasantry of all countries the path for emancipa-
from capitalist exploitation, the path to a prosperous and
y life. The experience of building socialism in the USSR has
ld-wide historic significance, it can be applied in all the
tries building socialism. This is proved by the practice of
socialist reconstruction of agriculture in the countries of
le's democracy, where, on the basis of cooperation, con-
rable successes in the development of agricultural produc-
have been achieved.

mrade Chernokolev then discussed some peculiarities of
ocialist transformation of agriculture in People's Bulgaria.
sidering the small size of the majority of the peasants'
ings (more than 70% of them had no more than five hectares
) and also the attachment of the peasants to their land, the
munist Party and the People's Government proceeded with
uilding of socialism in the Bulgarian village while retaining
rivate ownership of land. This made it easier for the poor
middle peasants to join cooperatives and served to strength-
e union of the working class and the peasants. The expe-
ce of Bulgaria confirmed the Marxist-Leninist thesis that,
untries with small-size peasants' holdings, the national-
on of land is not an obligatory condition for the development
e socialist reconstruction of agriculture.

e labor cooperatives in Bulgaria are developing as enter-
s of a socialist type, but with some residue of private
rship. To overcome the remains of private-ownership
ions in the cooperatives, it is necessary to lower the land
rent, paid to the owners of the land, and eventually, by the voluntary decision of the cooperatives themselves, to get rid of it altogether.

By the fall of 1944, when the first agricultural labor cooperatives were established, the land rent constituted 45% of the net income, i.e. the income which had to be distributed among the members of the cooperatives. At the second national conference of the representatives of these cooperatives (in 1950) the rent was determined according to the Charter of labor cooperatives at 30% of income. After the change in the Charter, in 1953, it was reduced to 25%, and in 1956 it was only 9.5% of the net income. Now, by decision of general meetings of cooperatives, rent has been abolished in 266 of them. The income in those cooperatives is distributed according to the amount of labor performed only.

The correct policy of the Bulgarian Communist Party in relation to the poor and middle peasants during the period of struggle against fascism and after the establishment of the people's power, promoted the rapid growth of the authority of the Party in the villages. In all villages of Bulgaria there are organizations of the Party which are, under the leadership of the Central Committee of the Party, carrying out great political and educational work among the peasants. Following the advice of Lenin about the enormous power of propaganda for the cooperative system, the Party has created model labor cooperatives in every region. Considerable help in the development of such cooperatives in the villages was rendered by the village intelligentsia.

Of enormous importance in securing the victory of socialism in the villages in a short period of time was the correct application by the Bulgarian Communist Party, in accordance with the specific conditions in the country, of the great experience of the Communist Party of the USSR in socialist construction. At present the share of labor cooperative agricultural enterprises in the total cultivated land of the country is 86.5%, while the cooperative and state sectors together embrace 90% of all the cultivated area.

Along with the development of the agricultural cooperative enterprises, measures are being carried out for the mechanization and electrification of agriculture. The achievements of agronomy are being introduced into agricultural practice, which results in raising the yield of the crops and the productivity of livestock. In the country, there are by now 200 machine-tractor stations with 22,500 tractors (in 15 h.p.), 3,600 grain combines and a considerable number of other agricultural machines.

The peasants of Bulgaria are firmly on the path of socialism, the path toward a prosperous and cultured life. From 1950 to 1956, the reserve funds of cooperative enterprises per one hectare of cultivated land had increased almost threefold. The payment per working-day also increased: the average for the entire country rose from 7.8 leva in 1953 to 12.42 leva in 1956. The people's regime has passed a law on pensions for older members of the cooperatives.

The most important factor in the successful building of socialism in Bulgaria, including the socialist reconstruction of agriculture, said Comrade Chernokolev, is the existence of the powerful socialist camp, headed by the Soviet Union, which is rendering enormous fraternal help to People's Bulgaria.

Comrade H. Mara (People's Republic of Albania) spoke on a number of problems of socialist construction in Albania. The common laws of the transition period, he said, are operating in Albania with certain peculiarities, which are to a great extent explainable by the historical past of the country: its extreme economic backwardness, considerable remainders of feudalism and semi-feudal relations, and cultural backwardness. Aside from this, some peculiarities in building socialism in Albania reflect the historical conditions in which the national revolution developed and succeeded.

One has to remember that the national-liberation movement was led by only one party — the Communist Party. The national bourgeoisie during the period of the national-liberation movement acted together with the occupying power against the people, which gave to the national-liberation movement a strongly pronounced class character. To solve decidedly the anti-imperialist problems of the revolution, it was necessary, immediately after the war, to nationalize the basic means of production. This measure was realized, in spite of the fact that the lack of qualified cadres created in the early days certain difficulties in organizing the management of production.

Because the national economy of Albania is developing under conditions of the existence of a mighty socialist camp, our Republic does not need to create some branches of industry of its own, as for instance, modern large-scale machine-building or metallurgy. In Albania we are developing the mining industry, some branches of the metal-working industry, the building materials industry, etc. The characteristic peculiarity of the industrialization of the country is the rapid growth of light industry. During some years, light industry was developing even at a more rapid tempo than heavy industry.

Presenting the peculiarities of the socialist reconstruction of agriculture in Albania, Comrade Mara pointed out that, in the Albanian village, from the beginning of the development of the cooperative system, production cooperatives of a higher type were created. Another peculiarity is that, thanks to the assistance of the socialist countries, and especially of the Soviet Union, the formation of socialist production relations in the village is developing parallel with the creation of the material-technical base corresponding to these relations.

Turning to the discussion of the materials for the planned collective work, "The Formation and Development of the Socialist System of World Economy," Comrade Mara said that there are two tasks before those who are preparing this work: to show in detail, using the rich factual material, the enormous importance of the Marxist-Leninist teachings on the socialist revolution and the general laws of the transition period, as well as to elucidate the problems of socialist construction in different countries. This work will also have value for unmasking the concoctions of the revisionists and bourgeois economists on the problems of socialist construction in the countries of people's democracy.

I. Frish (Hungarian People's Republic) devoted his contribution primarily to the problems of pricing in the socialist economy. Having observed that in the textbook "Political Economy" (2nd edition) it is repeatedly said that it is necessary to consider the operation of the law of value when determining prices on commodities, he said that this thesis is inadequately developed. For instance, there is no indication how the law of value should be considered and in what cases the prices could be established with deviation from value. Whereas these questions have not only a theoretical, but also a very important practical meaning. So, if it is not possible to increase the supply by increasing production and import, in order to meet the demand for certain commodities, it is expedient to fix higher prices on those commodities. But any deviation of prices from value should first be well considered and economically justified, for otherwise it can be harmful for the national economy as a whole. The unjustified deviation of prices from value first of all affects negatively production in the collective-cooperative sector and the private sector (in the countries where it is still operating).

In the opinion of Comrade Frish, any deviation of prices from value is permissible only in certain cases, for, in principle, they have to coincide with value. The massive deviation of prices from value is contradictory to the planned character of the socialist economy, because under such a system of pricing, society is deprived of the possibility of determining correctly the actual cost of production of various types of product.

Then Comrade Frish discussed the problem of considering the national peculiarities of different countries in finding the method for the most rational division of labor among the socialist countries. The national peculiarities of each country, said Comrade Frish, determine, to a decisive degree, the advantageousness of production of various commodities in different countries. Thus, the profitableness of production of various kinds of products is an important factor, which should be considered in resolving the problem of the rational division of labor in the world socialist economic system.

In conclusion, Comrade Frish dealt with the problem of planning the national economy and the elements of spontaneity in the development of the socialist economy. In his opinion, it would be wrong to say that in the socialist economy the elements of spontaneity and drifting are completely eliminated. So far we have not studied sufficiently all the phenomena which result from socialist production relations. In this connection the thesis of the textbook "Political Economy" (2nd edition) that spontaneity and drifting are incompatible with the socialist economy, being basically right, still needs additional explanation.

Comrade Jagvaral (Mongolian People's Republic), in the beginning of his speech, underlined that the Mongolian People's Republic, just as the other countries of people's democracy, is building socialism on the basis of the general laws of socialist reconstruction while taking into account certain peculiarities of national development. The main peculiarity here is that the Mongolian People's Republic is passing from feudalism to socialism, escaping the capitalist stage of development. Although the building of socialism was started in the Mongolian Republic only after the end of the Second World War, the Mongolian people already have achieved considerable successes. In the country a modern industry is developing, mechanized transport has been introduced, the reorganization of agriculture on socialist principles has been started. At present agricultural cooperation embraces 30% of all the "arat" (peasant) holdings. The cooperatives' share in the livestock of the country is 22%, and together with the livestock privately owned by the members of the cooperatives — 40%.

The land is nationalized in the Mongolian People's Republic, and that facilitates cooperation in agriculture. As for land-utilization, the land is not divided among the "arat" economies, and up to recent times even the state farms did not posses definite plots of land. But the rational organization of agricultural production requires that each farm should utilize a definite area of land.

In the process of agricultural collectivization, the Republic has to solve one of the most complicated problems — the transition of the nomads to a settled way of life. Agricultural cooperation will develop along with the organization of land exploitation by the cooperative and state agricultural enterprises.

One of the important peculiarities of the agrarian reforms in the Mongolian People's Republic is that the liquidation of the feudal holdings under the people's regime did not and could not result in the formation of a class of capitalists. In relation to the few capitalist elements that exist in agriculture, the Mongolian People's Revolutionary Party is carrying out a policy of re-education and bringing them to join in socially useful labor.

In carrying out the socialist transformation of its agriculture, the Mongolian People's Republic is widely relying on the cooperation experience of other socialist countries, and is receiving great help and support from them. All this creates exceptionally favorable conditions for the building of socialism in the Mongolian People's Republic.

Comrade Jagvaral then made some observations about the speeches of other participants of the session. Arguing against B. Minz, he declared that political economy cannot be converted into a collection of mathematical formulae. Political economy was and remains a science of economic laws of the development of society.

Comrade Jagvaral expressed the desirability of having conferences of economists of the socialist countries arranged systematically. The exchange of experiences in building socialism in different countries, he said, and the joint discussion of the main problems of economics are very useful.

Comrade Constantineskou (Rumanian People's Republic) in his contribution discussed the problems of the socialist reconstruction of the economy of the Rumanian People's Republic, and its transformation from a backward country into an industrial-agrarian state.

The development of the people's revolution in our country, he said, passed through two stages. In the first stage, the revolution had an anti-feudal and anti-imperialist character. This stage meant the realization of the aims of a bourgeois-democratic revolution. Though during the first few months after August 23, 1944, the bourgeoisie and the gentry still occupied the dominating part in the government and in the state apparatus, still the victory of the armed uprising, together with the liberating mission of the Soviet Army, inflicted a decisive blow on the political positions of the class of exploiters, creating conditions which resulted in the establishment, on March 6, 1945, of the people's democratic regime. By its essence, in the first stage of the Revolution, the people's democratic regime was a form of revolutionary-democratic dictatorship of the proletariat and the peasantry, in which the leading role belongs to the proletariat.

After the establishment of the people's democratic regime, agrarian reforms were carried on, which liquidated the class of landed gentry and the remains of feudalism. Democratic reforms in the state and economic apparatus were made, and the political forces of the bourgeoisie and the landed gentry were crushed. During this period the revolutionary-democratic dictatorship realized a number of important measures of an anti-capitalist character in order to vitalize and develop the national economy. Labor control over industrial production (through industrial administrations) was organized, the National Rumanian Bank was appropriated by the state, a currency reform was carried out in 1947, and a law against the sale of land to the "kulaks" was passed.

By the end of 1947 the working class, led by its Party, had completely gained state-power, and that was the beginning of the second stage of the revolution. In this stage the people's democratic state is a form of the dictatorship of the proletariat. The nationalization in 1948 of the main industrial enterprises, mines, banks, insurance companies, means of transportation and their transformation into state, national property meant the liquidation of private ownership, industrial and financial, by the bourgeoisie of the means of production and also of the domination of foreign capital in the country. The creation of a socialist economy was the principal premise for the organization of a planned economy in the country.

Enormously important for the socialist reconstruction of the entire national economy is the realization of socialist industrialization. During 1948-1955, more than 100 factories and mills were built in Rumania. More than 200 industrial enterprises were reconstructed and received modern equipment. Thanks to he extension of productive capacity and its better utilization, nd the increased productivity of labor, industrial production of he Rumanian Republic was raised almost 3.3 times in 1956, ompared with 1938. Socialist industrialization and the preferential development of production of the means of production resulted in a radical change in the structure of industry: the leading place was occupied by branches belonging to sector I. The hare of heavy industry in the gross product of industry rose from 46% in 1938 to 58% in 1956. Most rapidly developed were uch branches of industry as mining, power, metallurgy, machine-building, chemistry and building materials.

The implementation of socialist industrialization in Rumania, ust as in the other countries of people's democracy, said Comrade Constantineskou, clearly demonstrated the enormous international value of the experience of the Soviet Union in building ocialism.

Taking Rumania as an example Comrade Constantineskou howed the basic difference between the international socialist ivision of labor and the international division of labor under apitalism. If bourgeois-gentry Rumania, he said, was a raw-material appendage of the developed capitalist countries, people's Rumania, being a member of the group of socialist countries, can develop its productive forces in a most rational and fective way.

Then Comrade Constantineskou briefly discussed the problems of the planned organization of the division of labor in the ocialist camp, problems of pricing on the world socialist market, and of the correct specialization of industry and agriculture the socialist countries.

Comrade Constantineskou also made a few remarks about the eeches of some other participants as well as on the textbook Political Economy" (2nd edition). He disagreed with the assertion of B. Minz that the law of preferential development of the oduction of means of production is not proved. The operation this law, underlined Comrade Constantineskou, is an objective ct, which is confirmed by the practice of all socialist countries.

Comrade Bui Kong Chyng (Democratic Republic of Vietnam) ve an analysis of the socio-economic reconstruction of the mocratic Republic of Vietnam.

The pre-revolutionary Vietnam, he said, was a colony of ench imperialism; the predominant position in its economy longed to agriculture, which, under the conditions of the feudal-colonial regime, was on the decline. The landed gentry and e colonizers possessed 70% of all the arable land; and the are of the peasants, who constituted 90% of the population, was ss than one-third of the total arable land. The rent for the land was 50-70% of the harvest. Not less hard were the conditions of the workers in the industrial enterprises and on plantations. All the strata of society, outside of the small group of the bankrupt mandarins, the landed gentry and the not too numerous compradors, suffered from unbearable oppression by the colonizers. That is why the entire Vietnam people were united under the slogans of the Communist Party, "Down with French imperialism;" "Down with the power of the feudal lords and mandarins;" "Down with the enslaving poll-tax;" "Rice and land to the peasants, freedom to the people."

Taking advantage of the favorable international situation and the internal conditions resulting from the defeat of Japanese imperialism, the Communist Party of Indo-China, in August, 1945, issued a call for popular revolt. The August revolution overthrew not only the imperialist, but also the feudal lords.

The Provisional Republican Government under Ho Chi Min from the very beginning of its activity carried on certain reforms limiting feudal exploitation and alleviating the lack of land and the misery of the peasantry. In 1953 the Party of the toiling masses of Vietnam passed a resolution for agrarian reform.

In realizing the agrarian reform, said Comrade Bui Kong Chyng, unfortunately some mistakes were allowed to pass. Thus the possibility and necessity of executing the agrarian reform in certain regions was inadequately considered, the political influence of the gentry in the villages was overestimated, and this resulted in sometimes applying incorrect methods of dealing with enemies. Still, in spite of mistakes, the line taken by the Party was successfully carried through.

In the Vietnam village, cooperation began to develop. In 1956 in Northern Vietnam, there were 190,000 labor-mutual-aid teams, uniting 60% of all the peasant economies. Some industrial cooperatives too are being formed. Widely developing also is cooperation in the field of exchange, already uniting more than one million peasants. Credit cooperatives are being formed and 16 state farms are already functioning.

As a result of the efforts of the toiling peasantry and the care of the government of the Democratic Republic of Vietnam for the development of agriculture, in 1957, in the Republic a record harvest was gathered in spite of the unfavorable climatic conditions.

Considerable successes have been achieved in the field of industry in the Democratic Republic Vietnam. If in 1955 the total value of industrial production was 206 billion dong, in 1957 it reached 494 billion dong. Especially rapid is the development of the socialist sector of industry: in 1955 the value of the product of state industry was 23 billion dong, while in 1957 — 213 billion dong. But as a whole, industrial production of the country has not yet reached the level of the pre-war year 1939. Since the end of the war 70,000 formerly unemployed persons found work. By now there are 170,000 people working in the industrial enterprises of the Republic.

Domestic trade is rapidly expanding, and the state sector is playing the leading role. In 1957 the share of the state in domestic wholesale trade was 52% and in retail trade the share of the state and cooperatives together was 39%.

The strengthening and development of agriculture and industry allowed the Republic to establish and to develop successfully foreign trade with all the countries of the socialist camp and some capitalist countries too.

Comrade Bui Kong Chyng said that at the present stage, according to the specific conditions and the practical potentialities of the Republic, the development of light industry along with heavy industry is quite justified, though this does not change the necessity of developing primarily heavy industry in the near future.

For the reorganization of private capital in North Vietnam, the same as in the Korean People's Republic, various forms of state-capitalism are being used.

Serious problems arise in the country in connection with the existence there of some 10 million small producers. Undoubtedly the struggle for turning this petty-bourgeois element into the channel of building socialism will be hard and long. Another serious problem is the lack of qualified technical and worker cadres.

At this juncture the main problem for the entire Vietnam people is the unification of the country. The decisive condition for unification is the successful building of socialism in North Vietnam.

In conclusion Comrade Bui Kong Chyng said that it is necessary to improve the coordination of the economic development of the socialist countries in order to use more rationally their resources and to strengthen the fraternal cooperation of the countries in the socialist camp.

Professor G. Kolmey (German Democratic Republic) underlined that in the light of the Declaration of the Conference of the Representatives of the Communist and Workers' Parties of the socialist countries, and the Peace Manifesto, serious problems arose for the economists of the socialist countries. In those historic documents, in particular, the enormous danger for the cause of peace of the militarization of Western Germany was pointed out. Whereas the economists of the socialist countries, including the German Democratic Republic, still are not studying adequately the problems of West German imperialism. In solving these problems it is necessary to have the cooperation of the scholars of the socialist countries. It is also important, said Comrade Kolmey, that the economists of our countries should coordinate their work on the theoretical problems connected with the development of state capitalism, the foreign trade of the capitalist countries, etc.

Turning to the problems of socialist political economy, Comrade Kolmey stressed the great significance of Marxist dialectics for the study of the problems of socialist economics. To work out a logical system of economic laws is a necessary and most important task of socialist political economy. We have to pose more boldly the problems of contradictions in socialist economics, said Comrade Kolmey. In particular he pointed to the need of further working out the problems connected with the contradictions between the productive forces and the production relations.

Then Comrade Kolmey discussed the operation of the economic laws of socialism and methods of utilizing them. In that connection he discussed planning and spontaneity in the development of the economy, as well as the role of the state in the management of the economy and the initiative of the masses. In criticizing the conception of some economists (for instance, Berens and Benary in the German Democratic Republic), about the spontaneity of economic processes under socialism, including the field of market relations, Comrade Kolmey pointed out that if, under socialism, a broad sphere of action for the operation of "market automatism" would be allowed it would result in disproportions in the national economy, various conflicts, and would even promote the restoration of capitalism.

At the same time Comrade Kolmey considered it necessary to analyze more profoundly the various spontaneous processes taking place in socialist commodity production. As an example of such processes, Comrade Kolmey cited the constant changes in the relations between demand and supply and the changes in the socially necessary expenditures for production, which were called by Marx "revolutions in values."

G. Kolmey suggested more extensive use of conferences, oral examinations and other forms of joint work of Marxist economists of different countries on the problems of pricing, national income, reproduction, contemporary imperialism, etc.

Comrade K. Dobrev (People's Republic of Bulgaria) touched on some problems of the transition to socialism in different countries. He pointed out that under contemporary conditions, with the presence of the mighty Soviet Union, which played the decisive role in crushing the fascist invaders, and also as the result of the appearance of a number of socialist countries, it became possible and necessary to follow the peaceful road for the transition of different countries to socialism. This is true not only for the economically backward countries, but also for all countries where there are certain conditions in the class structure and a certain influence of the Communist and Worker' Parties on the broad masses of working people. Comrade Dobrev stressed that one should not confuse Lenin's idea of peaceful transition to socialism with the opportunistic theory of capitalism growing into socialism.

Then Comrade Dobrev discussed the peculiarities of the transition to socialism in Bulgaria.

Turning to the problems advanced in the report of K. V. Ostrovitianov, Comrade Dobrev discussed the problem of market production under socialism. He completely subscribed to the opinions of the reporter that the existence of production for the market in the state sector is conditioned by factors inherent in the development of state ownership under socialism. But, in his opinion in the way this question is formulated, it is not necessary to refer to such a factor as the existence of production for the market as a sign of the interrelation between state ownership and other forms of ownership. Under socialism, all forms of ownership require market production. Comrade Dobrev pointed out that in the manner that the question of necessity of production for the market under socialism is presented in the textbook "Political Economy" (2nd edition) there is some ambiguity.

Comrade Dobrev expressed some doubt about the correctness of including in the conception of the productive forces of a society all the means of production. The productive forces are constantly developing and changing, but such development and changes do not concern such forces of production as raw material, fuel, etc. There is not sufficient reason for including such means of production in the concept of productive forces.

In his contribution, Comrade Dobrev criticized the position and arguments of B. Minz on the question of the preferential development of the means of production. Comrade Minz said that technical progress leads to economy in the means of production per unit of article produced and therefore one cannot consider the point proved that the development of the technique determines a more rapid growth of Department I. In this reasoning one of the basic theses of the economic theory of Marx and Lenin is neglected, namely, that technical progress leads not only to economy in the means of production, but also to a greater economy in living labor. The correctness of this thesis does not require any proof with the help of mathematical formulae: the whole history of the economic development of society proves that the basis of growth of the productivity of social labor is the preferential growth of the production of the means of production. In different countries belonging to the world system of socialism, in some periods, a more rapid development of production of consumers goods is possible, but as a whole, in the entire world system of socialism, production is developing according to the laws of expanded socialist reproduction, and along with it, the growth of Department I is primary.

In his closing remarks, Academician K. V. Ostrovitianov said that this session was a good form of cooperation and socialist mutual assistance of the economists of the countries of the socialist camp.

In the speech of Comrade Minz, said Comrade Ostrovitianov, there were not a few useful and correct observations (for instance, on the necessity of intensifying the struggle with revisionism and dogmatism, of more effective criticism of bourgeois teachings, and of paying more attention to statistical and mathematical methods of analysis). Comrade Ostrovitianov at the same time voiced his disagreement with B. Minz on a number of questions. He stressed that political economy is the science of the laws of development of production relations, and therefore the reproach, hurled by Comrade Minz in the direction of the authors of the textbook, that they rely, as he expressed it, on the "method of laws," is wrong. Certainly it is necessary to better substantiate the laws, to demonstrate scientifically their operation as laws of development and to examine the contradictions in this movement. But, it is necessary to keep in mind that without laws there is no science.

Speaking about the treatment by B. Minz of the law of preferential growth of the production of the means of production, K. V. Ostrovitianov underlined that the essence of this law is that technical progress, lowering the expenditures of labor per unit of product, in absolute terms, is relatively increasing the share of labor embodied into commodities. Comrade Minz said that under contemporary conditions technical progress leads to the lowering of expenditures of capital investment per unit of manufactured product. But, first of all, this does not contradict the law of preferential growth of Department I, and secondly, one cannot imagine technical progress which would not result in the lowering of the expenditure of living labor per unit of product.

Lenin, in his work "On the So-called Problem of the Market," wrote that the entire essence and the entire sense of the law of most rapid growth of the means of production exactly and exclusively is in the thesis that the progress of technique in machine industry demands an intensified development of the production of the "means of production for the means of production." It is not true that this thesis of Lenin became antiquated in contemporary conditions. On the contrary, under the conditions of socialism, when complex mechanization and automation are in order, it assumes an incomparably greater significance than in the '90s of the last century, and generally under capitalism. The law of preferential growth of the production of means of production is proved by the entire history of the development of capitalism, by the 40 years of experience of economic construction in the Soviet Union, the practice of building socialism in the Chinese People's Republic and other countries of people's democracy.

Mathematical methods of analysis have to be widely applied in economics, but as an auxiliary tool for the study of economic phenomena, including the problem of preferential development of the production of means of production. One should not forget the methodological thesis of Marx that in analyzing the economic forms one can use "neither microscopes nor chemical reagents. The force of abstraction must replace both."

In connection with the contribution of I. Frish, K. V. Ostrovitianov declared that deviation of prices from value is not a violation of the law of value. A socialist country, when planning prices, starts with a consideration of value. But this does not mean the necessity of complete coincidence of commodity prices with their value in all cases. Ruled by considerations of the national economy, the planning organs may establish prices with certain deviation from their value and utilize a part of the profit derived from some branches for the more rapid development of other branches. This is the advantage of a planned economy. Comrade Frish said himself that economically justified deviations of prices from values are needed in the planned economy. As for the thesis of I. Frish that under contemporary conditions prices should be brought closer to values, this is correct.

Taking exception to some remarks of K. Dobrev, K. V. Ostrovitianov stressed that the commodity character of the means of production under socialism is conditioned by the unity of the socialist economy, by the interrelation between state ownership and other forms of ownership existing in the given country, as well as by the unity of the socialist system of world economy and by the economic relations of the countries of the socialist and capitalist camps.

As for the peculiarities of state ownership and the requirements of its development, conditioned by the necessity of commodity-money relations, this question cannot be considered apart from the mutual relations among the different forms of ownership existing under socialism. The many-sided discussion of this problem requires the joint examination of all factors and causes which demand commodity production under socialism.

One cannot agree with Comrade Dobrev when he objects to the inclusion in the concept of productive forces such means of production as raw materials, fuel etc. The new types of energy (and of raw materials), as for instance, atomic energy, result in a revolution in the productive forces of society and have a considerable influence on the economic base of society.

Comrade L. M. Gatovsky, in his closing words, stressed that the work of the present session was carried on according to the principles embodied in the historical Declaration of the Conference of the Representatives of the Communist and Workers' Parties of the socialist countries. He expressed his agreement with the basic theses advanced during this session, and observed that the basic theses of his report also did not meet objections.

Then L. M. Gatovsky made some critical observations on certain opinions expressed by those comrades who participated in the discussion. He pointed out the wrong position of Comrade Minz on the problem of preferential growth of the production of the means of production. The preferential growth of the production of the means of production is a firm objective law, having vital importance for the world system of socialism in its competition with the capitalist system. Contrary to the opinion of Comrade Minz, the operation of this law is vividly revealed in our epoch. The argument of Comrade Minz, calling in question the existence of this law, is refuted by actuality, by the totality of the conditions of reproduction. It is a fact that, along with the growth of technical progress, there are (per unit of product) relatively more and more means of production used in the national economy. This is true for the capitalist countries as well, for instance, in connection with the processes of mechanization of agriculture in the US and western Europe.

Then Comrade Gatovsky spoke on some problems of the world system of socialism, on the basic economic task before it and on the coordination of the plans and development of the world socialist market.

L. M. Gatovsky once more underlined the necessity for criticism of the erroneous conceptions of some economists appearing in the press, for instance, the assertion that only after the complete mechanization of agriculture is it possible to start to build socialism in the villages, and also the view perverting the concept of socialism and considering it as a multi-form economy (predominance of socialist order in the towns, and of private ownership in the village).

Comrade Gatovsky made a suggestion about the development of cooperation among the scholars of the socialist countries for investigating economic problems.

The scientific session unanimously adopted a resolution completely approving the Declaration of the Conference of Representatives of Communist and Workers' Parties of the socialist countries and the Peace Manifesto approved by the Communist and Workers' Parties. The joint work of the economists of the socialist countries, on the basis of the principles of the Declaration (said the resolution), has great significance for the development of Marxist-Leninist economics and for the strengthening of the world socialist system of economy.

The scientific conference of the economists of the socialist countries, after having discussed the most important problems of development of the world socialist system, approved the collective work entitled "The Foundation and Development of the Socialist System of World Economy," and recommended it for publication. The Conference commissioned the Institute of Economics, USSR Academy of Sciences, to publish the work.

The participants of the conference considered that the experience of the collective work of the economists of the socialist countries on the most important problems of development of socialist economics completely proved its value. They planned to make every effort to continue to develop this close scientific cooperation between the institutes of economics and other scientific economic organizations of the academies of sciences of the socialist countries.

The resolution outlined further practical steps for the coordination of scientific work of the economists of the socialist countries.

In closing the conference, the director of the Institute of Economics, USSR Academy of Sciences, Academician of the Lenin All-Union Academy of Agriculture, I. D. Laptev, in the name of the Soviet economists, expressed thanks to the economists of the countries of people's democracy who participated in this scientific conference. Comrade Laptev pointed out the success of this conference, the growing ideological unity of the economists of the world socialist camp and the usefulness of the discussions which took place at the conference.

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This scientific session is proof of the further expansion of scientific contacts and cooperation of the scholars of the countries of the socialist camp. This fruitful cooperation is playing an important role in the development of science in the countries of socialism and in the more rapid solution by the scholars of different socialist countries of urgent scientific problems.

M. Sakov

Some Questions of the Theory and Practice of Price Formation in the U.S.S.R.

In the discussion on commodity production and the operation of the law of value under socialism, particularly great stress is given to the problems of price formation. This is easy to understand. Price formation is one of the most important levers of the planned, balanced application of the law of value to the management of the economy. During the discussion, many interesting considerations were offered and suggestions made, which have a theoretical as well as a practical meaning. Still, some economists are trying to treat the problem of price formation from a position of "pure theory," so to speak, neglecting the many years of practical experience in this field. These comrades are advancing certain practical proposals, based on abstract theoretical formulas, with which, in our opinion, it is impossible to agree.

In many articles devoted to this problem the correct thesis that the law of value is the law of prices is adduced and, therefore, it is argued, prices should conform to values. On this basis, the proposition is advanced that it is necessary to improve the practice of price formation, first of all, by bringing prices closer to values.

The stipulation that prices be brought closer to values raises no questions about the theoretical relationship as much as it indicates the necessity for more consistently taking into account the law of value in systematically setting prices. In a socialist economy where commodity production exists and the law of value operates, value constitutes the basis of price, and consequently, must serve as the primary criterion of its economic justification. But this is too general a thesis, especially when the talk centers on putting it into practice, as was clearly demonstrated by the discussion.

Some of the participants in the discussion, speaking of the need to bring prices on goods closer to their values, have in mind measures permitting improvements in the existing price system, based on past and present policies of the Party and the Soviet state in this field. Others consider that the formula, expressing the requirements of the law of value, is not applied by us in practice. Wholesale prices on the means of production are set below their values; retail prices on consumer goods, above their values. Because of this, they propose to effect a reform of prices: to raise wholesale prices on the means of production up to the level of retail prices. Certain economists (J. A. Kronrod and others) propose to raise the prices on the means of production to the level of retail prices in one fell swoop, while others believe this should be done gradually (A. V. Bachurin and others). But, one way or another, this represents a radical reorganization of our system of price formation.

The main defect of this theoretical position, its weakness, is, in our opinion, in treating the law of value and its requirements abstractly, not historically.

Commodity production and the law of value existed and still exist in various historical phases. A consideration of these phases is of decisive importance in an examination of the specific operation of the law of value as the law of prices.

In a simple commodity economy, the commodity-money relations are realized in their simplest form. This is manifested by the fact that value is here directly regulating retail prices; is acting as the norm around which they are fluctuating under the influence of demand and supply. With the transition to capitalism the operation of the law of value becomes more complicated, changes. Value is reflected through the cost of production, which becomes the direct regulator of market prices. Under such a pricing system normal deviations of prices from their value appear: in branches with a high organic composition of capital they deviate upward; in the branches with low organic composition of capital they deviate downward. Those deviations are not a result of the law of value itself; they are conditioned by the character of production relations under capitalism, which subordinates the operation of the law of value to the direct aim of capitalist production — to receive profit in proportion to the capital invested.

At the stage of monopoly capitalism the operation of the law of value becomes still more complicated. Price becomes an instrument for the achievement of high monopolistic profits by a small group of the wealthiest capitalists. This is achieved through a policy of high monopoly prices, primarily on the products of the monopolized branches of production. As a result of this prices deviate from value still further than under free competition.

In a socialist society new conditions appear for the development of commodity production. These new conditions should be considered, in our opinion, first of all in ascertaining the specific operation of the law of value as the law of prices in socialist economy. This is the really scientific, historical approach to the problem, which demands that the principles of pricing be found, not from abstract formulae of the law of value, considered out of time and space, but in the specific historical conditions under which the law operates.

The theory, according to which the law of value must operate in its simplest form and that market-prices have to express directly the quantity of value, is applicable more or less to the conditions of a simple commodity economy. But it is not applicable to more complicated forms of an economy, in which commodity-money relations exist.

Marxists never made a festish out of the law of value. They always criticized sharply the representatives of utopian petty-bourgeois socialism, who considered the substance of socialism as the ideal application of the law of value. Proudhon in his time advanced a demand for the "constitution of values." There were not a few utopian attempts to express and measure value directly in units of working time and to organize on this basis an "equitable" exchange of goods. Marxists defined long ago their negative attitude toward those petty-bourgeois utopians in all their different forms.

In our opinion, it is hardly possible to consider as fruitful the intensified search by some of our economists for a mathematical formula by which it would be possible to express and measure value directly in units of working time and then to determine prices in strict conformity with it. Such efforts contradict the very substance of the Marxist theory of value. At this juncture one should remember the fruitless attempts of some representatives of petty-bourgeois socialism of the type of Proudhon, Grey and others to reduce value to its immanent measure — working time.

The substance of value is abstract labor. This is the specific form of social labor inherent in commodity production. Abstract labor concealed in commodities acquires the form of value and is measured by money. There is no other method, and there cannot be any, to express and measure abstract labor. When such conditions of production, under which it would become possible to compare specific types of labor and to calculate the necessary outlays of labor directly in units of working time, would be created, the form of abstract labor and its form of value will disappear. At present such conditions do not exist in our socialist society. That is why it is necessary to compare the specific types of labor in value and consequently to reduce them to abstract labor, which differs from specific labor precisely because it cannot be measured directly in units of working time.

As long as commodity production is preserved to a certain extent in a socialist society, the law of value operates; and, in practice, one cannot ignore the requirements of this law. But they should not be turned into a fetish. It means not that the planned economy has to adapt itself to the demands of the law of value, but on the contrary, all the operations of the law of value should be consciously directed by society in the interests of strengthening and developing the socialist economy. This thesis is completely applicable to such an important economic lever as the mechanism of price formation. In our opinion, the main task in the field of pricing is not to bring pricing policy into complete accord with the abstract demands of the law of value, but in completely subordinating the operation of the law of value to the interests of the rapid development of the socialist economy. The active utilization of the law of value not only does not exclude, but presupposes steady deviations of prices from values. This means that the planned socialist economy, by its very nature, is not and cannot serve as a ground for "ideal" realization of the requirements of the law of value. And this is not a defect, but an advantage of the planned economy. If the dreams of the petty-bourgeoisie about the "ideal" realization of the law of value would become at some time a reality, that would be a most decisive step backward from socialism to capitalism.

By making the law of value a regulator of prices in that primitive form, which is inherent to a simple commodity economy (when value is directly regulating market-prices), we would make a step backward, even in comparison to capitalism. As it is known, under capitalism the law of value appears in the modified form of production prices, i.e. in the form under which technical progress is stimulated in one way or another. As a result of reorganization of prices entirely on the one universal principle, of conformity with values, without considering any other, and not less important, factors a condition would be created under which the most backward branches of production with a high proportion of living labor would operate under the most favorable conditions, while the technically most progressive branches (where the expenditure of living labor is comparatively small) would operate under the most unfavorable conditions. Such prices would not stimulate technical progress, but the expansion of manual labor. That is why it is impossible to agree with those conceptions, which see the entire solution to the problem of rebuilding our planned pricing system on the basis of a passive adaptation to the requirements of the law of value, without considering other economic laws.

It should be noticed that the logic of the adherents of such conceptions is very peculiar. They advance the following idea in different ways: everything that stems from the requirements of the law of value completely corresponds with the interests of socialism. The law of value, they say, as the law of prices, demands complete agreement between prices and values, as long as value is the embodiment of the expenditure of social labor in the product. Thus, the precise accounting of the expenditure of labor is necessary, not only in order to know the cost of production, but also to apply the socialist principle of distribution according to the labor contributed. Therefore, the interests of planned economy demand the formation of prices in complete accord with values, and deviations should be reduced, if not to naught, at least to the minimum.

This argument seems to be, at first glance, convincing. But, as a matter of fact, it is based on a not quite correct understanding of the nature of value and has in mind not the active application of the law of value (that requires deviation of prices from values), but a passive adjustment of the economy to its requirements.

Value, just as its expression in money-price, is not an absolute indicator of the expenditure of social labor for the production of given goods, but a relative one, not a direct measure but an indirect one. Only working time, i.e. the immanent measure of the social labor, can be the absolute and direct measure of the expenditure of labor. Niether by value, nor by its expression in money, i.e. price, can one determine the necessary working time (in hours) for the production of a given product. If, by some method, we could calculate the average outlay of labor for producing a certain product, we would again not in this case calculate the value, for it is a specific form of expressing the amount of social labor in a given product. Value indicates only the relation between one and another product of labor, depending on the expenditure of labor. In the price, this relation is expressed in a money equivalent. For instance, value can represent the following series of relative quantities:

1) The value of commodity "A" is equal to the value of commodity "B" (it means that commodity "A" contains as much socially necessary working time as commodity "B").

2) The value of commodity "A" is two times less than the value of commodity "C" (it means that commodity "A" contains half as much socially necessary working time as commodity "C").

3) The value of commodity "A" is 20 times higher than the value of commodity "D" (it means that commodity "A" contains 20 times more socially necessary working time than commodity "D").

If we express all these relations by one universal equivalent (the role played by money) we would have a series of prices. The price, understood as a quantity, is first of all a definite amount of money; in this respect, it is an absolutely fixed quantity. But as the money expression of the value, it is a relative quantity expressing the relation between the commodity and its money equivalent under given conditions of commodity production and circulation. Suppose that the value of commodity "A" is related to the money equivalent as 1:10 (taking the ruble as the money unit). Then, the prices would be as follows: commodity "A" — 10 rubles; commodity "B" — 10 rubles, commodity "C" — 20 rubles; commodity "D" — 50 kopeks. Even if we assume that these prices express accurately their values, still we would not have learned by these prices the absolute amount of socially necessary working time (in hours) contained in each or all of these commodities.

Consideration of the cost of production, the exchange equivalent, distribution in accordance with labor time, all these are very important problems of socialism, for whose correct solution prices have to be determined on the basis of values. But the essense of the matter is not in these problems. Planned pricing is needed in our case, not for the "ideal" expression and measurement of value for value's sake, so to say for its "constitution," but for the active application of the law of value in the interests of socialism. And, if these interests require the normal deviation of prices from values, then there is no room for any arguments about the toleration of such deviations. It is important only that they should be economically justified, that they really meet the cardinal interests of socialism. One can formulate in general outline the most typical cases, when deviations of prices from values are economically warranted under a planned economy.

They may be called for by the necessity of a) consideration of the relationship between effective consumer demands and the volume of production of various types of consumers goods; b) economic stimulation or curtailment of production and consumption of certain types of goods; c) stimulation of the introduction into production of new technique and the most up-to-date materials; d) stimulation of the lowering of the cost of production, distribution expenses, utilization of production wastes and the increase of accumulation within the economy; e) proper distribution and redistribution of the net income of society, effective mobilization of the savings of the economy in the centralized resources of the state.

Price policy is based on the consideration of the demands of the law of value, all the factors enumerated above, which reflect the specific conditions of its application, as well as those political-economic tasks which exist at each stage of socialist construction. All this should be considered when clarifying the ways of further improving planned pricing in our country. By relying on the abstract requirements of the law of value, one cannot find the correct solution of this problem.

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Under the conditions of a planned socialist economy the relation between the prices of the means of production and of consumption goods constitutes an important problem. This problem was advanced by the experience in planned pricing in the USSR and has already found a definite practical solution. Now it has become one of the principal points of discussion. Apparently, if the very practice of pricing is under discussion, and consequently the price policies adopted by the socialist state, the entire argument should be based on a study and analysis of that practice. Only such a discussion of the question could be fruitful. Addressing himself to the economists, statisticians and writers, V. I. Lenin wrote: "We have first to study our own practical experience and only on the basis of a detailed study of the relevant facts to recommend the rectification of mistakes and the improvement of work... More knowledge of facts, fewer polemics pretending to stick to the communist principles."*

We have accumulated a rich practical experience in price formation. To argue about the principles of price formation while ignoring this experience, not analyzing it in a most detailed manner, means to carry on an empty academic controversy. And still some economists follow such an erroneous path. They are especially worried by the question as to what extent the existing system of prices corresponds to the general formula of the law of value. Those economists see the main defect in the existing practice of price formation in the existence of a gap between the levels of prices for the means of production and consumers goods: the first are considerably below their value, the second higher.

One must say, that during certain periods, especially during the Patriotic War and in the first post-war years, there actually existed a great gap between prices and values, and on some products it is still not ended (prices on certain types of production still are set on a lower level than their values, and therefore a state subsidy is required). Nobody entertains any doubts about the justification of the demand for a quick liquidation of this gap by bringing prices closer to values. Measures for this are being taken. An important role was played in it by the reform of retail prices in 1949, and, undoubtedly, in the future much work has to be done in order to improve wholesale and retail prices.

But some economists have in mind not only this gap between prices and value. Proceeding from the general formula of the law of value, they consider as a necessity the cardinal reform of the pricing system. The essence of the reform, recommended by them, is in establishing a uniform level for the prices of the means of production and of consumers goods. Absence of such uniformity in the system of prices, they say, contradicts the law of value, distorts relations between sectors I and II of social production, the economic indices of production, distribution and exchange.

In order to examine such a formulation of the question one has first to define more exactly the factual side of the problem. If one would ask whether there is really a substantial gap between the levels of prices of the means of production and consumers goods, then to this indefinite question one has to give an equally indefinite answer: yes, and no. This vagueness of the question and the answer is explained by the fact that on the means of production only wholesale prices are set, while on consumers goods — wholesale and retail prices. Hence, it is necessary, first of all, to clarify, what gap between what prices is the issue.

Unity of prices on means of production and consumption can be of two kinds: either it is the uniformity of wholesale prices, or it is the uniformity of wholesale prices on the means of production and retail prices on consumers goods. To combine these two aspects of uniformity is impossible (in the sense of their common level): one excludes the other. Hence, it is necessary, first, to define on what level wholesale prices on the means of production and consumers goods should be set or whether wholesale prices on the means of production should be raised to the level of prices on consumers goods. In the latter case a gap would arise inevitably between wholesale prices.

Unfortunately, during the discussion, the factual side of the problem was not always presented in an exact form, and this led to misunderstandings in the theoretical debate. The problem is presented in such a way that it looks as if we have a gap between the level of prices on products of sectors I and II of social production. This supposedly leads to an abnormal economic relationship between these two sectors. While, as a matter of fact, all economic connections and interrelations in each of the sectors as well as between them are realized on the basis of uniform wholesale prices in their structure. This is the sphere of the turnover inside the economy, which includes both sectors I and II of social production.

The dividing line in price formation, strictly speaking, passes not between sectors I and II of social production, but between the sphere of wholesale [inside the economy] turnover and the sphere of retail turnover. These two spheres of economic turnover are relatively independent and the disparity in the level of prices in them has its economic justification. It is in the fact that the wholesale (inside the economy) turnover is carried on at wholesale prices, and therefore demands first of all the uniformity of wholesale prices on the entire product (for sectors I and II alike). But if the wholesale prices on means of production would be raised to the level of retail prices, there would occur a gap in the level of wholesale prices for the products of sectors I and II of social production. Such a reform of price formation would be economic nonsense.

It is also not true that different levels of wholesale and retail prices are distorting the main economic indices. Such a distortion would really arise if wholesale prices on the means of production would be lifted up to the level of retail prices and thereby diverge from wholesale prices on consumers goods.

At the present time, uniformity and comparability of the economic indices in the national economy are achieved because all transactions are executed on the basis of equal wholesale prices on the means of production and consumers goods. These prices contain in them two elements: the cost of production and profit. They guarantee to practically all socialist enterprises normal conditions for reproduction on a large scale on the basis of economic accountancy. This is precisely the degree of independence of industrial enterprises that is permissible in a planned economy.

All enterprises of sectors I and II of social production realize their product in wholesale prices and by the same prices purchase the needed means of production. Hence, the cost of production (of means of production as well as consumers goods) is calculated in comparable prices. Retail prices have no relation whatever to this, and there is no divergence of prices distorting the picture in any way.

Gross output and commodity production by the branches and by the national economy as a whole are expressed and measured by us in wholesale prices. Thus, the directly noncomparable wholesale and retail prices are not summed up. It is true, and it should be admitted, that our statistics are not completely consistent: when counting up the national income, the aggregation of wholesale and retail prices is, in essence, permitted. As the result, the national income is a quantity that cannot be directly compared with combined gross production and commodity production. It is important, of course, to achieve comparability of these combined indices of value.

The goal of bringing prices closer to values can be achieved, if one understands this problem correctly. Not through fruitless attempts of finding measures of the absolute value of every type of product, but through an improvement in the entire system of pricing, so that it would reflect the real relations of the values of the different types of production, allowing only such deviations which do not distort these relations as a whole and do not undermine the comparability of the indices of the value. To this end is needed, first of all, a uniform scale of prices. Within the framework of internal industrial turnover, such a uniform scale is presented precisely by the system of wholesale prices. All indices of value of economic activity of the socialist enterprises and economic organizations are calculated in those prices, and this insures the comparability of these indices.

Retail commodity circulation, the sphere of which is relatively separated from wholesale turnover, is transacted in retail prices. They represent, of course, another scale of prices. This means that the same value, expressed in retail and in wholesale prices, is expressed in quantitatively different money equivalents. Therefore, wholesale and retail prices are not directly comparable. Nevertheless, this does not distort the general picture of the process of reproduction, because the wholesale and the retail turnovers are not directly combined, but represent two phases of the economic turnover, which solve different problems and perform different functions.

To pose the question of raising the wholesale prices to the level of the retail prices in order to establish a uniform scale of prices, as it was said above, makes no economic sense, if for no other reason than because retail prices contain in them elements which are not and could not be found in wholesale prices. But, maybe it is justifiable to pose the question of considerably reducing the gap between the level of wholesale prices and level of retail prices? If this question would be formulated more specifically, then the question is mainly about the turnover tax and in what prices and how it should be assessed.

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* Lenin, "Collected Works," vol. 32, p. 121 (of Russian edition).

At the present time there are two types of wholesale prices n our economy: a) one is without the turnover tax and b) the ther with the turnover tax. The first are prices of internal ndustrial circulation; the others are applied to consumers oods delivered by industry to the trading network. Thus, the rnover tax, representing a considerable portion of the net come created in sector I, as well as in sector II, is not as- essed (under the pricing system now in force) on internal in- strial circulation. The only exception is in the wholesale rice on oil, which includes the turnover tax.

Hence, the question about the necessity of a reform in the ricing system revolves around the propriety of imposing the rnover tax on internal industrial circulation. If it should be roved that this is necessary, then price reform would consist t in raising wholesale prices on the means of production up the level of retail prices, but in a certain increase (by the nount of the turnover tax) of the general level of all wholesale ices, which are now used for internal industrial circulation. other words, it would be necessary to set not two, but one t of wholesale prices (with the turnover tax) and to establish iform prices for internal industrial circulation, instead of ose used now, namely wholesale prices without a turnover x.

But what would be the result of such a reform from the point view of considering the general requirements of the law of lue, as well as from the point of view of considering the in- ests of a socialist economy?

First, the realization of the value of the basic mass of sur- s products will be brought closer to the place of production is is particularly underlined by those who recommend the re- m). But the realization of the surplus product in the prices the enterprises in a socialist economy is not an economic essity, because the enterprises themselves do not dispose of greatest part of created accumulations. More than that, for planned economy it is more advantageous to have such a sys- n of prices, under which the mass of accumulations is not ttered, but concentrated in the hands of the state.

econdly, the suggested reform by itself will not introduce any provements into the specific relation between the prices on erent products from the point of view of a better economic ification (for this constructive recommendations are needed, ed on a study of the practice of price formation). Only the between the levels of wholesale and retail prices will be rowed, i.e. the scales of these prices will be drawn closer. the application of the law of value in the interests of so- ism, this also would not play any serious role, because the lesale and retail turnovers are relatively separated and any erence between them in the scales of prices does not play any siderable role.

hirdly, to pass such a reform would mean a cardinal change e policy of prices, and this has decisive significance. Con- ently, the question of the need of such a reform is, before hing else, the question of the need for a change of the policy ricing.

far we had a policy of low prices on the means of produc- steadily lowering them on the basis of the growth of produc- y of labor and the reduction in the cost of production. On the s of this policy the existing system of prices was built. Now e economists desire to change the policy of low prices, h, in their opinion, was justified only during a certain d, for a policy of high prices on the means of production, of all by imposing the turnover tax on internal industrial lation.

e policy of low prices on the means of production was sci- ically substantiated in the resolutions of the Communist y and the Soviet Government. This policy is determined by ndamental peculiarities of a socialist planned economy. point here is not only in the fact that low prices are neces- for a maximum facilitation and economic stimulation of ical progress. Low prices (but, certainly, not with loss) eeded also because under conditions of the absence of com- on they serve as the most effective method of stimulating eduction of costs, increasing internal industrial accumula- nd its rational use. In other words, they actively help to in the best way the law of value in the interests of so- m, they are not mechanically adjusting the planned econ- o the general requirements of the law of value.

"In our system of economy," the resolution of the February (1957) plenary session of the Central Committee of the Communist Party stated, "the policy of lowering prices is the method with which the working class is exerting influence upon lowering the cost of production, is forcing the economic organization to increase its maneuverability, is encouraging the rationalization of production and thereby is creating really healthy sources of socialist accumulation."

An important problem in the socialist economy is the present mobilization of a maximum of the internal industrial accumulations into the centralized resources of the state, and leaving in the hands of enterprises a minimum of them, in conformity with the principles of economic accounting. Under the existing system of prices the turnover tax, which constitutes a considerable part of net income, is not imposed on internal industrial circulation and thereby the possibilities of its dispersion and concealment are limited. This is certainly an advantage of the existing price system. "The policy of concealed accumulations," said the above resolution of the plenary session of the Central Committee of the Party, "the forcing of unforeseen capital expenses under the form of repairs, the increase of profits along with too high expenses, especially on trade — all this is created by the policy of high prices and is not in the interests, but detrimental to the interests of the national economy. It is not hastening, but injuring the fulfillment of the planned development."

It is true that the economists, who propose to include the turnover tax in the wholesale prices of the enterprises, declare that this would not mean leaving it at the disposal of the enterprises, but it would be withdrawn in a certain way to be included in the budget. But it is not difficult to understand that the inclusion of the turnover tax in internal industrial circulation by itself would create thousands of "cracks" and "leaks," that could not be practically "closed;" considerable sums of the turnover tax would become scattered and accumulated in the enterprises and organs of the economy, without reaching the centralized resources of the state.

Under the existing price system the mobilization of accumulations into the centralized resources is not a complicated problem. This is the virtue of the existing system. Further, in the wholesale prices of the enterprises, only a minimum of accumulation is kept, determined by the aims of economic accounting, while the basic part of the accumulations is realized in the prices under which the goods appear in retail commodity circulation. This facilitates to a maximum degree the task of regulating the relationship between the fund of consumption and the fund of accumulation. Such control is carried on by necessary changes in the retail prices without affecting wholesale prices. Through the retail prices only are the accumulations, which are created in production and are already found in the aggregate social product, redistributed. The much larger part of net income contained in retail prices, demonstrates not the excess of their level over the value of consumers goods, but that these prices, as a whole, express the same value, but in another scale of prices. The economic necessity of such a scale is justified in considerable degree by the task of redistributing net income into the centralized resources of the state.

We are drawing attention to all this not in order to assert that the existing pricing system is beyond reproach. No, this system has not a few defects and needs serious improvement. And this improvement must follow the line of bringing prices closer to values in the sense of economic substantiation of specific prices and their relation with various types of products. Planned prices in all branches of the economy have to guarantee normal conditions for reproduction on the basis of economic accountancy. They have to exclude unjustified losses in individual enterprises and subsidies from the state, necessitated by the losses.

But the practical experience of price formation in the USSR is, generally speaking, a positive experience. It confirms that the policy of prices, followed by the Party, and the system of prices, resulting from it, basically correspond with the interests of the socialist planned economy and help to realize its advantages over capitalism. It is especially important that this problem is solved not through passive adjustment of the planned economy to the demands of the law of value, but through the active use of the operation of this law in the interests of socialism, which presupposes steady deviations of prices from values. Therefore, the task is not a cardinal change in the policy of prices and the principles of price formation prescribed by it, but in further strengthening and improving the existing system of prices, in controlling the planning of prices and in the further increase of their role in the national economy. Such a task, certainly, can be successfully solved, not on the basis of abstract reasoning about the demands of the law of value, but through the laborious, all sided and profound study of our practical experience in price formation, its positive sides and its defects. Only on the solid basis of facts can scientific analysis and scientific generalizations render decisive aid to socialist practice.

L. Alexandrov

A Scientific Conference Concerning Problems of Calculating Labor Productivity in Socialist Agriculture

The study of the productivity of labor in agriculture has a very important role for the national economy. Soviet economists have to define, from correct scientific positions, the movements and the level of labor productivity, the separate factors of its growth, and, most important of all, to work out the most expedient and scientifically accurate method for their measurement.

From the 25th to the 28th of September, 1957, there was a scientific conference in Moscow on the problems of measuring the productivity of labor in socialist agriculture. It was organized and run by the Institute of Economics of the USSR Academy of Sciences together with the Economic Scientific-Research Institute of the Gosplan and the All-Union Scientific-Research Institute of Agricultural Economics.

In opening the conference, the director of the Institute of Economics, USSR Academy of Sciences, professor I. D. Laptev, enumerated the tasks of the conference. He noted the unsatisfactory condition which exists in the study of productivity in agriculture, in the collective farms, the machine-tractor stations and the state farms. The different approaches to measurement followed by the Central Statistical Administration of the USSR and by the land departments are responsible for the lack of coordination in their work; very often they disorient the practical workers. There is no uniform opinion even among economists on questions of the method of calculating this important index. That is why this conference has to lay the foundation for important work, not only on this problem, but also on other problems connected with the necessity of raising labor productivity in agriculture. This will have a not inconsiderable meaning for the successful solution of problems facing agriculture, among them the task of catching up in the next few years with the US in per capita production of meat, milk and butter.

Doctor of Economics E. S. Karnaoukhova (Institute of Economics, USSR Academy of Sciences) presented a report to the conference. Her report was entitled, "On Methods of Measuring Labor Productivity in Agriculture." To measure correctly the movement and level of the productivity of labor, it is necessary to measure more exactly the product made and the working time spent on it. This condition is applicable to industry and to agriculture. The latter is a specific sphere of production. In it the kolkhoz-cooperative form of socialist property is broadly represented in combination with state property, and this creates the peculiarity in the relations of production, exchange and distribution. Hence the necessity of measuring the total productivity of labor in agriculture as a branch of the economy (including the collective farms, the machine-tractor stations [MTS], the state farms and the individual auxiliary farms), as well as separately by the different categories of farms.

A proper study of the question of labor productivity in the machine-tractor stations and collective farms is directly connected with an understanding of the peculiarities of the nature of production on collective farms and of the relationship between machine-tractor stations and collective farms. The machine-tractor stations and collective farms produce the product together. Part of it is produced by workers of the machine-tractor stations. The collective farms turn over to the machine-tractor station a part of this production in kind, as well as money to pay for their work. As far as the joint production of the farms and machine-tractor stations is concerned, their productivity could be expressed by an aggregate index of the total production of the collective farm, considering the total working time spent by the collective farmers and the workers of the machine-tractor station jointly, i.e. an index measuring the productivity of the workers of the collective farm and the machine-tractor station.

The inclusion of the machine-tractor stations in the main index of labor productivity, calculated on the basis of units of labor time expended by the workers of MTS and collective farms does not exclude the possibility of calculating labor productivity for the MTS and the collective farms separately. But under the present system of accounting in the MTS, one cannot calculate the number of working days spent by the mechanics and other workers in various branches of collective farm production or on the production of specific crops and cannot define correctly the productivity of labor performed jointly by the MTS and the collective farms or performed separately. Therefore, it is necessary to overcome the underestimation of the amount of working time in the MTS.

For the collective farms, aside from the general index of labo productivity calculated on the basis of the gross product, according to the time spent by the workers of the MTS and collective farmers, it is possible to calculate labor productivity on the basi of gross product, minus the payments in kind and in cash for the work performed by the machine-tractor station, in relation with the working time of the farmers only. Along with the construction of a general index of labor productivity in the MTS there is a basic need for the construction of physical and value output indices measuring in units of labor time the number of hectares of soft soil worked by one man, the fulfillment per worker of his daily and seasonal norms.

The question of the individual auxiliary farms is connected with the specific peculiarities of agriculture. During the scientific conference on problems of statistical methodology used in studying labor productivity in agriculture of the USSR (held in December 1956) it was suggested to measure labor productivity in agriculture by two indices: (1) for public farms alone and (2) including the production of the individual auxiliary farms – but expressing these two variants of calculation of production in one and the same index of working time — the number of collective farmers occupied in agricultural production. In the opinion of E. S. Karnaoukhova it is not correct to measure labor productivity on the public farms by including the amount and output of labor on individual auxiliary farms. This would lead to an erroneous presentation of actual conditions with respect to the productivity of labor in the collective farms, for manual work predominates on the individual farms.

A peculiarity of agricultural production also noted was its shar seasonal character. The working period does not coincide with the production period. The process of production takes place in different natural conditions (climate, soil). Consequently, the result, with the same outlay of labor, could be different in different years and in different regions. From this arise a number of important conditions for the calculation of labor productivity in agriculture. The final product, the use-value in agriculture, is created, as a rule, only at the end of the year, and is measure by the annual results, not by daily results, as in industry. Therefore, labor productivity in agriculture in terms of final results i production, can be measured only at the completion of the entir cycle of production, i.e. once a year. This makes it necessary t exercise control over the amount of labor and its productivity during the entire cycle by a system of indirect and incomplete indices. The latter also acquire special meaning for agricultur in connection with the dependence of the output of labor on clima ic conditions — precipitation, temperature, etc.

Some economists suggest that the natural factors be ignored when calculating the productivity of labor and comparing its lev As a matter of fact, the study of the movement and the level of labor productivity must consider the influence of soil fertility and climatic conditions. It must also take into account any extr costs incurred and differential rents. It is necessary to include in the analysis a general index — the output of product per 100 ectares of farm land, as the most important production index f the level of land use. We need not just "some," but a growth f productivity of labor in agriculture which will secure a higher evel of production of agriculture and an increase in output per ectare of land.

Another specific trait of agriculture is its specialization. A pecialized agricultural enterprise with many branches produces iverse products which are very difficult to express in combina-ion in one physical unit. Specific labor and the physical production nade by it cannot be compared. In this connection E. S. Karnaou-nova examined the question of combining the component indices f labor productivity — volume of production and labor time — nd expressing them in uniform, comparable indices (physical alue etc.).

Having discussed the normative method of measuring labor roductivity, E. S. Karnaoukhova stressed the expediency of sing it for time study under the influence of various factors growth of labor productivity, for demonstrating the role of chnical progress, for applying advanced methods of agricul-ral engineering and zootechnique, and other purposes. This ethod has a particular importance in planning labor produc-ity and deserves special examination. It is also important r the comparison of the movements and levels of labor pro-ctivity in the USSR and in the US. But the normative method flects only roughly the actual productivity of labor. The norm-ive outlays of labor are stable and do not coincide with the tual outlays, which are constantly changing.

In our socialist agriculture the basic method of measuring bor productivity, its movements and levels, depends on fac-al data. But this does not exclude the possibility of also using rmative data. For the planning of labor productivity which, the way, is not yet practiced to any large extent on the collec-e farms, the normative calculations, based on factual data, e quite indispensable.

In the paper, a separate section was devoted to the question of ing and past labor and the methodology of measuring labor oductivity connected with it. It is not practical to include a culation of the productivity of all social labor in the accounts l in the indices of all agricultural enterprises, considering complexity of calculations and the necessity of making ad-onal special scientific studies on their methodology.

But the most important point is that in calculating labor product-y, the basic criterion is the productivity of living labor. Liv- labor sets in motion masses of past labor, but only living or creates new values, simultaneously transferring to the duct by concrete labor the value of the used up means of duction. The index of productivity of living labor gives a ar idea about the effectiveness of the labor of the principal ductive power of society—man. This index is generally access- and can be easily calculated. Therefore one cannot agree both the negation of underestimation of the method of calculating productivity of living labor, and with the suggestion of measur- only the productivity of living labor.

peaking on the measuring of labor time, E. S. Karnaoukhova sented data relating to the practices and the results of such surements in several collective farms (Thaelman in the nensky region, and Krupskaya in the Briukovetsky region, etc.). method of measurement used in these collective farms bles them to determine correctly the time actually worked, to w accurately the changes in the movement and level of labor ductivity, to reveal unused labor resources, and to take essary measures for raising labor discipline. It also makes sible posing before the leaders of the collective farms the s of more complete utilization of farm labor, the develop-t of new branches of farming, and on this basis the raising he annual labor productivity of every farmer by securing him work for the entire year in the economy. This results in ncrease of per hectare and per worker output for the entire ective farm and leads to an increase of income in kind and in ey for the entire farm and for the individual farmer.

he reporter thought that, for the entire mass of the collective ns, at present, it is possible and necessary to limit oneself by suring labor time in terms of working days. In the state ns it is possible to measure in working hours. If necessary, collective farms can convert, with sufficient accuracy, work-days into working hours, as the regime of work is based on the seasons of the year. For this purpose the Central Statistical Administration and the Ministry of Agriculture of the USSR should select in all zones of the country some typical collective farms and introduce there the measurement of working time in hours.

Of significant importance is the question of what workers should be considered for measuring the productivity of labor — only those who are directly engaged in production or also the engineers, and technicians, servicing and administrative staffs. It is better, in agriculture, to include in the measure of labor productivity not only the direct expenditure of labor, but also the corresponding share of indirect labor in production and management, just as in calculating prime costs. One should remember that in the social expenditure of labor there is a certain part of the labor not directly related to the sphere of material production, as, for instance, the work of bookkeepers, guards, etc. When analyzing the productivity of labor and the methods of raising it, it is necessary to consider the structure of labor expenditures, to separate labor expenditures for overhead and management, and to plan methods for reducing them.

When analyzing the movements and level of labor productivity in agriculture and its branches it is very important to measure correctly the product. The best way to express labor productivity is by the amount of the physical product of a given type produced in a unit of working time or vice-versa. But this method does not give a picture of the level of labor productivity for the whole of agriculture and its main branches. Therefore the necessity arises of measuring the productivity of labor by the amount of a product of a given type or the production achieved in a unit of working time, in money terms. It is also important to measure the productivity of living labor in so far as it conserves past labor. We should also try to find more precise methods of measuring past labor and to measure the productivity of the total social labor, rather than to discard the index of gross production and to replace it by indices of net production or commodity production, as is proposed by certain economists. The majority of economists consider it necessary to express the product in money, in uniform stable prices, when measuring the productivity of labor. The uniform, comparable prices of 1926-1927 many people consider, quite justly, as antiquated.

In closing E. S. Karnaoukhova summed up the basic points of her report, as follows:

The productivity of labor in agriculture has to be studied firstly, by direct, complete indices; secondly, by indirect and incomplete indices, which are not set off against the direct and complete indices, but are auxiliary and additional.

Gross production, expressed in value terms in relation to one hour, one man-day, or one average worker per year, serves as a direct and complete index of productivity in agriculture as a branch of the national economy, and in its main subdivisions — tillage and livestock breeding. Along with the study of labor productivity in agriculture as a whole, as well as in plant-growing and livestock breeding, it is necessary to study the productivity of labor in grain-farming, cotton-growing, production of milk, wool, meat and other products of agriculture by direct, complete indices of labor productivity in the form of physical product (or its value) in relation to working time: one hour, one man-day or one worker per year.

In the opinion of the reporter, one cannot agree with the decision of the agricultural section of the Conference on Statistical Methodology concerning the studies of labor productivity in the USSR economy, that the volume of production of various types of products — for instance, grain and cotton — per man-day in physical terms is an incomplete index. It is as complete and direct an index of labor productivity in grain-farming or cotton-growing as the gross product of agriculture per unit of working time, which defines the productivity of labor in agriculture as a whole. This index even has certain advantages for defining the level of labor productivity, though it is not without certain defects too, with respect to its inadequate consideration of the quality and composition of the product.

Besides, labor productivity and its changes in agriculture may be reflected in the general indirect indices and be measured by incomplete indices, expressing the outlay of labor time not per unit of product, but per unit of work performed. A requirement of concrete operational management demands the measurement of labor productivity for each type of work.

E. S. Karnoukhova suggested that the indices of labor productivity be classified in the following manner: (1) direct and complete indices, i.e. the production expressed in physical and in value terms in relation to working time (hour, working day, whole year); (2) indirect, artificial indices of labor productivity. To them belong: the output per average able-bodied worker, the number of working days per centner of production, the output per working day, the volume of labor per worker, the crop harvest, the productivity of cattle, the quota of grain-crops and cattle per worker, the output per 100 hectares of farm land, etc; (3) partial, incomplete indices: realizing the norms of the worker in various processes of production, etc.

The report of Academician V. S. Nemchinov was devoted to methodological problems in the study of the growth factors of labor productivity in agriculture. He discussed the characteristics of the three basic methods of study of labor productivity; by physical type, by value, and by measuring working time. In the opinion of V. S. Nemchinov, the only uniform index able to reflect all the factors in the growth of labor productivity is the method of measuring the amount of labor required for a given task. This method permits observations and study of the stages of the production process. An advantage of this method consists also in the fact that it corresponds to the specific conditions of agriculture.

To prove the advantages of this method, V. S. Nemchinov referred to the work especially performed on the Hammer and Sickle and Forty Years of October collective farms in the period of preparation for this conference. The condition for the successful application of this method was a detailed accounting of several operations. The entire production carried out on a given group of crops was measured. The calculation of working days and working time spent was accomplished through the division of the actual quantity of work completed by the actual daily norm of output and actual area of sowing, which gave the number of working days spent per hectare. In an analogous way, the true expenditure of working days per unit of work or head of livestock was determined. By measuring the product (harvest, yield of milk, etc.) we obtained the expenditure of labor time and working days per unit of product received.

As a whole, the proposal of V. S. Nemchinov reduced to a combination of the methods of labor and normative measurement, with the addition of a third method — the method of controlled measurement. In the opinion of the reporter, this is the best that can be accomplished at present in the field of the methodology of studying the factors of the growth of labor productivity on collective farms, where there is not yet any accounting of working time for the various operations and various products, but only a general accounting of working days.

Calculating the productivity of labor in socialist agriculture on the basis of determining the amount of work needed in agricultural production through the study of actual expenditure of labor, is, in the opinion of V. S. Nemchinov, a very flexible method. An examination of the factors of growth of labor productivity by this method is readily accessible to any scientfic research organ or any individual scientific worker. In particular, this method makes possible a comparison of the levels of labor productivity on any collective farm or state farm for one year or several years. This method can also be applied for the evaluation of the results of socialist competition between agricultural enterprises. Moreover, those factors which secure a higher level of productivity of labor in one enterprise when compared with another and also when compared with other years or a certain basic period, could be discovered in this way.

This method of studying the amount of labor required for the production of various agricultural products is connected with the study of the outlay of living labor. It makes possible the measure not only of the direct outlay of labor, but also of general work, like that for repairs of machinery, upkeep of the draught animals, etc. Expenditure of labor for overhead and administration is distributed among several branches of production and types of agricultural production in proportion to the direct outlay of labor. Hence, it is possible to determine the level of productivity of labor in socialist agricultural enterprises and the general expenditure of labor in the total economy or in the agricultural economy of the given territory.

The method of studying the amount of labor required in agricultural production also makes it possible to determine the outlay of labor embodied in commodities in previous stages of production. By calculating, for instance, the amount of labor required in the production of fodder for draught animals, in the production of seeds, the production of fuel in certain industrial enterprises, as well in the production of fertilizers, toxic chemicals, material for repairs, machines, etc., it is possible to calculate the outlays of present and past labor for the production of various types of agricultural goods.

At present, on the basis of this method, the Council for the Study of Productive Forces, USSR Academy of Sciences, determined the amount of labor required in production and also calculated the outlays of present labor on all agricultural crops and all branches of animal breeding in 32 zones of the country.

A. M. Briansky (Central Statistical Administration of the USSR) presented a report on "The Productivity of Labor in Animal Breeding in Relation to the Task of Catching Up in the Next Few Years with the US in per Capita Production of Meat, Milk and Butter."

A characteristic of agriculture, he said, is that the growth of labor productivity here is the result, not only of the reduction of the outlay of labor by means of mechanization, improvement of technological processes, etc., but also of the attitude of the worker to the economic objective assigned to him. This is connected with the quality of labor, which does not always lend itself to statistical measurement. Hence, there are two ways of raising labor productivity in livestock breeding: first, by the maximum reduction of labor expenditure, and second, by the maximum use of biological and economic possibilities for increasing livestock and animal productivity connected with the problems of reproduction of the herd, production and also of increasing fodder resources.

In the last few decades labor productivity on state farms and collective farms increased considerably. Fundamental advances were made in the last three to four years. But still the growth of labor productivity in livestock breeding is lagging behind that in tillage. During 1950-1955, labor productivity in tillage increased one-and-a-half times; in the livestock breeding, only 15%. The level of labor productivity still is inadequate. For instance, to obtain an increase of one centner of cattle in 1956 on the state farms it was necessary to expend about ten man-days, while on collective farms, more than 21 man-days; on hogs, 8 and 20 man-days respectively; for the production of one centner of milk, 1.76 and 2.9 man-days. While the outlay of labor per unit of product decreased somewhat in 1957, it has to be reduced for all livestock breeding by 3.5 to 4 times more, if the assigned tasks are to be fulfilled.

In order to achieve the high tempo of increases in labor productivity required for the fulfillment of the assigned tasks within the planned time limit it is necessary not only to effect a sharp reduction of outlay of labor per head of livestock, but also to increase the productivity of the animals.

In the future, there can be a considerable increase in the total yield of milk. Though the yield of milk on the collective farms almost doubled in 1957 in comparison with 1953, still its level was much lower than on the state farms.

Enormous possibilities exist also for the production of meat. Chief among them are the liquidation of barrenness of the female herd, increasing the litter per sow and per sheep, liquidating cattle plague, keeping young cattle up to 2-2.5 years, increasing the weight of cattle for slaughter, and improving the fattening of cattle, hogs and poultry. Another important possibility for the increase of meat production lies in the development of cattle raising for meat. Even in Kazakhstan — the most "meaty" region — cattle of the meat producing kind constitute only 20%; in the Volga region 29%; and in the North Caucasus 7%. But in the USSR there are, on the average, more than 70% of pedigreed cattle on the collective farms, and 100% on the state farms. In several republics (Estonian SSR, Ukrainian SSR and Moldavian SSR) and in a number of regions there are 100% pedigree cattle, and practically all of a high milk-producing kind. It is necessary not only to expand the fodder base, but also to use rationally the already existing fodder resources.

As for the possibilities of lowering the expenditure of labor per unit of product in livestock breeding, chief among them are improvement of the organization of production on farms and a ther intensification of labor effort, which is closely connected h an increase in material incentives for workers engaged in estock raising and with the development of socialist compe- on. There are enormous untapped possibilities in the field electrification and mechanization of labor. Most serious ention should be given to such measures for sharply reducing outlay of labor, as the pasturage of hogs on potato fields, building of milking sites and other such very effective meas- es, which hardly require any capital expenditure.

t is also important to make a comparison of the levels of or productivity in different regions of the country. For in- nce, in 1956 the outlay of labor per centner increase in the ight of cattle was 13 man-days in the Estonian SSR and 32 n-days in the Georgian SSR. If we would increase the output certain products of livestock breeding in those regions where ductivity of labor on these products is high, and the outlay labor is low, the result will be that the social productivity labor will be higher for the entire country. Hence, it is clear y further discussion in the shortest possible time of the prob- ns of the distribution of various branches and tendencies of icultural production in specific regions and determining their lds of specialization is so important.

K.I. Yeremeyev (the Economic Research Institute of Gosplan) oke on questions of the status of existing systems of account- , indices of labor productivity, coefficients for converting rking days into man-days, and other basic methodological estions related to the calculation of labor productivity on the lective farms.

The main obstacle to the correct calculation of labor produc- ity on collective farms, the reporter commented, is the ects in measurement. There are two methods of effecting measurement of the levels and movements of labor produc- ity on collective farms and MTS: 1) the organization of a stem of measuring labor spent in the collective farms and MTS not only for the entire enterprise, but also by branches, ps and types of cattle; and a reflection of those indices in annual reports; and 2) the calculation of labor outlays in n-days from the data of the existing accounting books. The st method makes it possible to solve the problem only in spective, though it is necessary to know the level of labor ductivity in the past years. Therefore it is necessary to rk out a method for measuring labor expenditures using the ond method in man-days.

n the opinion of the reporter, the index of annual output of duct expressed in value per average annual worker occupied agriculture reflects the productivity of labor more accurate- This index makes possible a comparison of the dynamics abor productivity in agricultural enterprises situated in erent regions with different natural and economic conditions. e expenditure of labor in man-days on a unit of product, ex- ssed in physical terms, is an important index for the deter- ation of the economic efficiency of an industry. It makes it sible to compare collective farms, regions, areas, and zones erms of absolute output per man-day of crops, types of ani- ls and farming as a whole.

aving listed the defects and merits of these indices, in com- ison with the indices of output per able-bodied farmer, the orter discussed the problems of the utilization of the work- day. The results of our study, he said, indicate that the king day should not be used as a unit for calculating the king time consumed. Working days are also counted when re is no actual work performed (for instance, in case of lease pace, paid leaves of absence; studies; length of service, etc.). instance, in Lipetzk province, from 1950 up to 1955, the total ber of calculated working days, not connected with actual labor, reased sixfold and in 1955 constituted 2.5% of all working- s. On the other hand, the working day does not include all the ual work of certain categories taking part in agricultural pro- tion like workers of the MTS and hired workers, who are members of collective farms (combine operators, weighers, .). The difference in the rate per working day for the same d of work on different collective farms also makes difficult mparison of labor productivity on collective farms. Finally, working day does not reflect the increase in labor produc- ty, resulting from the improvement of its organization, ter planning of working time, etc. Consequently, in a working day, spent on different crops, on different types of cattle, in different branches, there are hidden different amounts of labor time actually performed. For instance, in the collective farm, "Progress," in Lipetzk province one working day in 1955 corresponded to 0.67 man days spent on grain crops; 0.78, on potato fields; 0.97, on vegetables; 0.51, on sunflowers; 0.84, on fodder. Similar differences in the outlays of labor, expressed in working days and in man days, were observed in other collective farms.

Some economists think that to calculate the outlay of labor in man days it is sufficient to use the coefficients for the conversion of working days into man days, established for instance, in 1955, and that the relationship between the working day and man-day is a constant quantity. But the selective investigations performed by the section on agriculture of the Economic Research Institute of Gosplan in 1955, indicated that this relationship is not constant over the years, over various branches, crops and varieties of livestock for one collective farm, as well as in different collective farms, regions and provinces. For instance, the average coefficient for conversion of working days into man days in 1955 was: in Voronezh province 1.99, in Lipetzk province, it was 1.75 for the collective farm "Ilyich" while for the collective farm "Progress," in the same province, it was 1.47. On a checkup it was established that the calculation of the outlay of labor by such coefficients distorts the actual level of these outlays by the different collective farms and regions, and, even more so, by the different branches, crops and varieties of livestock. For instance, on the collective farm "Progress" the number of man days, calculated by the coefficients of the Central Statistical Administration as percentages of the number of man days calculated by selecting samples from the original records, was 87.9% tillage; 74.9% cultivation of grain crops; 57.8% livestock raising; 64.2% in potato fields; 130.7% in sugar beets; 57.8% on cattle farms; 75.9% in hog raising; 55.8% in sheep breeding, and 73.9% for this collective farm as a whole. Consequently, these coefficients can be used for the calculation of the outlay of labor expressed in man-days only where there are budgetary provisions (for the province, republic, or entire country). As for individual regions, collective farms, branches, different crops and types of livestock, the only solution of this problem is in the use of the materials in the existing accounting books.

The Section on Agriculture of the Research Institute of Gosplan has worked out a method for calculating the outlay of labor in man days for the production of a unit of product in agriculture and has prepared instructions for its use. The basic points of this method are: 1) it is worked out for the calculation of the outlay of the living labor; 2) in calculating the index of labor productivity on the collective farms it is necessary to include the labor of the collective farmers and of the MTS workers, also keeping in mind that in practice it is important to calculate both the productivity of the collective farmer and of the farm hands too. The determination of the outlay of labor in man-days is made on the basis of the annual reports of the MTS and of the collective farms, as well as on the results of an examination of the budgets of the collective farms by the Central Statistical Administration of the USSR. The total number of man-days is determined on the basis of the number of average annual workers and the number of days actually worked by a collective farmer during the year. Though in the annual reports of the collective farms there are no data on the number of average annual workers for the branches and for the entire farm, they contain some indices very close to it (for instance, the index calculated as an average for 12 months from the data of table number three of the annual report, or the index of the number of workers who have worked in livestock breeding). The number of days spent at work per average annual worker is determined on the basis of form number eight of the examination of the budgets of collective farms by an appropriate calculation. On the basis of the data received on the number of actual working days during the year and the number of the average annual workers, it is not difficult to find the total number of man-days for the entire farm. It can be determined also with the help of the coefficients of the Central Statistical Administration (if there are budgetary provisions). The results of these two methods differ very slightly.

In closing Comrade Yeremeyev touched on the special problems in applying this method to the different branches.

A report on calculation of the gross product in agriculture was presented by S. A. Zaremba (The Economics Institute of Gosplan). The reporter declared that the significance of the indices of value for the study of labor productivity is exaggerated. For instance, several economists proposed to evaluate the entire production of the collective and even the state farms by normative prices and also to include in the annual reports and the plans of the collective farms, the indices of money equivalents, etc. By these data, it is planned to compare the productivity of labor of sectors and the whole economy by territories, etc. But the indices of labor productivity and of the cost of production have different meanings. For instance, in the collective farms of the Lipetzk province in 1956 the outlay per one centner of beets was 0.9 of a working day and on potatoes one working day. At the same time, the state price for one centner of potatoes was 2.5 times and its cost 3 times higher than for one centner of sugar beets. The expenses in the past for the production of one centner of beets were eight rubles, while on one centner of potatoes — 24 rubles, 23 kopeks. Even more contradictory results are obtained when comparing labor productivity in different zones of the country, as the result of a difference in sectional price of collective farms, and the delivered prices of state farms. Thus, if the entire production of the collective farms would be evaluated in state purchase prices, one centner of soft wheat in Kirovograd province would cost 85 rubles and in Archangel province 120 rubles, but the outlay of labor for the production of one centner of wheat under the conditions prevailing in the black earth zone is considerably lower than in the "podzol" soils of the Northern provinces. For the planning and calculation of increasing labor productivity the only reliable methods are those methods that enable one to measure saving in the outlay of the working time. Therefore it is more expedient to turn the study of the problem in this direction.

Then the reporter discussed the problems of calculating gross product and proposed a number of practical suggestions for regulating the system of prices on agricultural produce. Finally, Comrade Zaremba noted the defects in the existing bookkeeping of the state farms, MTS and collective farms and the necessity for promptly working out a scientific method of calculating gross product in agriculture and also of determining the economic efficiency of agriculture.

A report on "Methods of Planning Labor Productivity in Agriculture" was presented by B. I. Braginsky (the Economic Research Institute of Gosplan). Revealing that in the planning of labor productivity in the recent times, certain improvements, especially in state farms, were introduced, he said that still there are weak points. The weakest among them is the absence of over-all indices of labor productivity, measuring the total output per worker and per unit of working time.

Certainly, in the collective farms, as cooperative enterprises, the planning of labor productivity must be, just as the planning of production, internal. It is necessary to help them to organize the proper calculation and planning of labor productivity as a whole, by branches and brigades, keeping in mind the importance of the organizing and mobilizing value of this index and its role in justifying the feasibility of the production goals and plans.

In the annual perspective plan there should be only the most important indices: output per worker and pay expressed in monetary terms, and also the outlay of man-days in the production of one centner of several basic types of products. In the combined plans, beginning with the provincial one, the approved index should be only the index of the growth of labor productivity in the planning period, which compares with the base period. Only in the appendices to the plan should certain additional indices of labor productivity necessary for calculating the size of the labor force, for the drawing up of balances, etc., be given.

Comrade Braginsky made some other remarks on the indices which were proposed during the discussion. For instance, he considered it possible, for the first time, to use for the evaluation of production, the average prices of 1956 as comparable prices for all the categories of economy. The average annual number of workers should be determined by a method similar to the one used in industry. But he did not agree with the proposals of Comrade Karnaoukhova about the method of classifying a full-year worker on the basis of the amount of labor time actually expended. He outlined that this index must be tied to the planning for the whole year because, otherwise, this working time during the year incompletely utilized would not be reflected in the index of labor productivity. Comrade Braginsky also noted that it is necessary to distinguish between the planning of productivity in the enterprises and in the central, provincial and republic organs. In his opinion the basic method for the planning of labor productivity from the bottom up should be the normative method, though in the province and in the administrative center a subsidiary method of calculation should also be used — in some cases the method of grouping and the method of sampling data for the entire complex.

Noting the great importance of the normative method of planning labor productivity in agriculture, Comrade Braginsky stressed that, at the present time, it is necessary to direct one's efforts towards the formulation of a normative base. In conclusion he expressed confidence that the implementation of detailed planning of labor productivity will have an important effect in obtaining an increase in collective farm production.

G. M. Volosenkov (All-Union Scientific-Research Institute on the Economics of Agriculture) next presented a paper on the method of computation and the system of labor productivity indices on the state farms. On the state farms, he said, a system of indices of labor productivity is needed which would define the capability of labor for the farm as a whole and for its individual branches and measure the outlay of labor in the production of a unit of the main agricultural products per hectare of principal crops, per head of cattle, and also per unit of the principal types of work in tillage and stock-breeding.

Labor productivity on a state farm is the gross output of agricultural work, expressed in comparable prices, by the average worker engaged in agriculture. For tillage and livestock raising, it is the gross output of these branches by the average worker engaged in the given branches. It is also the gross output of their basic varieties, expressed in physical terms, per working day. The expenditure of labor per hectare of area of agricultural crops, per head of livestock and also per unit of the most important types of work on the state farms is computed in order to obtain a more detailed analysis and to discover further possibilities of raising labor productivity.

In calculating composite value indices of labor productivity on state farms, the question arises of scientifically substantiated comparable prices on products. Comparable prices should comply with the following requirements: 1) reflect outlays of socially necessary labor (or average outlays) in the production of a unit of a given type of product; 2) reflect the quality of production (the breed of livestock, quality of seeds, etc.; 3) be uniform for all regions and farms of the country (for otherwise the indices would not be comparable); 4) remain unchanged for a number of years, so long as they satisfy the first of the above requirements, and be changed when they cease to do so. Production of previous years should be then computed anew with the use of proper coefficients.

The reporter declared that a system of new comparable prices on the products of agriculture has been worked out. As the basis for these prices the average cost of production of every type of output in 1953-1956 of the state farms under the Ministry of Agriculture of the USSR was taken. To the average cost for the state farms of a unit of output was added 7% for the accumulation of the enterprise. Comparable prices for various products were established on the basis of the percentage of the outlay of labor for each type of product made by the former Ministry of Agriculture of the USSR. The by-product (straw, beet-leaves, etc.) was priced according to the average cost of harvesting of one centner of the given crop on the state farms, while the incomplete production in agriculture was priced according to the type of work on the basis of actual cost on state farms for the previous years. In his opinion, these prices could be used both on state farms and on collective farms.

It is known that, in calculating gross production of agriculture in comparable prices and measuring labor productivity by the amount of gross output per unit of labor employed, differences in the structure of production are revealed, to some extent. For instance, in producing grain, the proportion of the outlay on payments for the labor constitutes 22-23% of the cost of production of the principal type of products, while in production of fodder-roots it amounts to 38%. A change in the proportion hose crops to the total amount of gross output of a state farm influence, to some degree, the index of labor productivity in iculture. Opposition to the calculation of the productivity of r on the state farms by the gross production usually is based similar facts. But a basic change in the specialized functions state farm and a radical change in the branch structure of a n very seldom occur and ordinary fluctuations in the propor- of various types of output to the total gross output cannot ort the indices of labor productivity. In comparing the com- te indices of labor productivity on state farms with different ls of production, it is necessary also to consider the differ- e in their structure of production.

ome economists believe that the composite indices of labor luctivity on state farms should be calculated not by gross ut, but by the so-called "net income" or "net products." In opinic ,of the reporter, the calculation of the indices of labor luctivity by these indices is not possible. Prices on realiza- of industrial and agricultural commodities deviate consider- from their value. Aside from all other reasons, the devia- of prices of realization from the value of the products de- nines the distribution of the "net income."

ttempts to find physical indices, which could express labor luctivity in the agricultural economy as a whole, and also in ge and livestock raising separately, were fruitless, in the ion of the reporter. The calculation of a composite index of r productivity measured by the amount of commodity pro- ion per worker would not guarantee a correct evaluation of cesses of a state farm in the struggle to lower the outlay of r per unit of product. Into commodity production of the state h also enters the production received from the main means roduction (as meat of the cattle). In various state farms the portion of younger animals which were raised and kept to ease the herd in a given enterprise, as well as the cost of kling pigs received from the outside for fattening and led on the farm, vary. Therefore, the size of the product vered to the state and sold, in one way or another, does not sure the real quantity of production of a state farm.

he reporter suggested that the gross product of agriculture alculated in two variants: 1) the total gross product of til- and stock-breeding; 2) the same, but without counting the luct consumed on the enterprise itself and without the agri- ural product received by the state farm from outside in a shed form. The necessity of calculating the gross product of state farm in two variants was explained by the need for ving not only the "physical volume" of the gross product, also that part of it which was actually produced on this rprise.

closing, Comrade Volosenkov mentioned the error of iden- ng the index of productivity of labor in agriculture with the ces of crop capacity and the volume of production per 100 ares.

he report of A. A. Radchenko (Institute of Economics, USSR demy of Sciences) was devoted to the characteristics of the th of labor productivity on the tillage of collective farms in post-war period. Along with it, a number of questions con- ing methods of calculating labor productivity in agriculture were discussed.

he reporter discussed especially the meaning of the working This is a measure of the outlay of labor, even though it is a standard of the expenditure of working time. Comrade chenko expressed the opinion that any large-scale study of growth of labor productivity on collective farms, either in past or present, is impossible without the use of the working Even if the working day is not suitable for comparing the uctivity of several workers, differing in their qualifications labor effort on different types of work, the aggregate expend- of working days on certain work makes it, nevertheless, ible to determine the volume of work performed and, with help of the piece rates and the norms of output, to discover amount of work expended in a given time (in standard days).

aving explained a number of problems connected with the use e working day for calculating the productivity of labor on ective farms of the USSR, Comrade Radchenko, using fac- material, demonstrated that, despite the steady growth of r productivity in agriculture, this growth, especially in til- , is unfolding unevenly. The unequal level of labor productivity in different zones and, also, the annual fluctuations depend on the conditions of utilization of labor in agriculture. In order to obtain the most reliable data on labor productivity in socialist agriculture, it is necessary to study on a large scale the mass of material. This would make it possible to take into consideration the influence of unfavorable climatic conditions of different years on the results received. Only in such a case is the development of the productive forces revealed as the decisive factor in the steady growth of labor productivity. Since the growth of labor productivity in agriculture is not always identical with the growth of crop capacity, the reporter proposed also the use of the index of land utilization, i.e. the amount of products received per 100 hectares of farm lands.

A thorough study of zonal fluctuations in the levels of labor productivity in agriculture, said A. A. Radchenko in conclusion, should facilitate the solution of the problem involved in making use of the operation of the law of value in the USSR, the study of cost of production of agricultural produce, the theoretical and practical questions of pricing, taxation policy, etc. The mass calculation of the labor outlay on collective farms should be made in working time (best of all, in man-hours). Along with this zonal coefficients should be worked out for the conversion of working days into man-days in order to use more extensively the material on the expenditure of working days for the study of the level and dynamics of labor productivity on collective farms for previous years.

P. M. Kuzovlev (the Ural branch of the Academy of Sciences of the USSR) presented a report on the results obtained in the study of labor productivity on the collective farms of the Bogdanovichesky region of Sverdlovsk province. During this work, the methods of evaluating labor, recommended in the literature of 1956, were used. Calculations were made on the basis of data collected on the spot in 16 collective farms of the region.

In order to select the method of determining labor productivity on the collective farms of Bogdanovichesky region, the productivity of labor was calculated by taking into account one able-bodied worker, engaged in the social farming of the collective farm, one average annual worker, regardless of his ability to work and of his membership in the collective farm, and one full-time worker, who took part in the social farming of the collective farm. The calculation of labor productivity per able-bodied and per full-time worker was done by the method described in the textbook "The Economics of Socialist Agricultural Enterprises" (1956, per average annual worker—according to the book by B. Braginsky, "On Indices of Labor Productivity in Agriculture" (1956). The outlays of working days per centner of product, the production of gross product per working day expressed in value and in physical terms and also per collective farmer engaged in one of the branches of the farm also were determined.

The results of the computations for the 16 collective farms of the region led to the following conclusions: a) A general defect of all the enumerated methods of determing labor productivity is that they measure only roughly the real conditions of labor productivity on collective farms and do not always reflect even the general trends or changes in its level. Besides, the comparison of the indices obtained by different methods often give contradictory results. b) When determining labor productivity from the value of the gross product, it is necessary to deduct expenditures made by the collective farms in payment for the work performed by the MTS. Otherwise, the productivity of labor in the collective farms is exaggerated, for in the gross product is included the output, which is the result of work performed by the present labor and past labor of the MTS. c) The methods of determining labor productivity per able-bodied and full-time worker could be used with necessary adjustments. d) The method of determing labor productivity per average annual worker, in the opinion of the reporter, could not be used even with adjustments, considering the present calculation of average annual workers. He cited table number three of the annual report of collective farms, which includes unreliable figures. Even if these data were more exact, they still could not be accepted, because also included among those who took part in the work of the collective farms are those who worked just one day a month as well as those who worked 30 days a month. e) The method of determining labor productivity per able-bodied worker has one very important advantage: It makes it possible to compare how efficiently the labor force is utilized on different collective farms and also to mobilize them in teams, according to their best possible uses. The index per able-bodied worker reflects at the same time the productivity of labor and the degree of utilization of the labor force on collective farms.

Labor productivity was calculated for all the collective farms of the Bogdanovichesky region per one able-bodied worker, as well as per one whole-time worker (in rubles and in percentages of 1950). As a result, when applying these two variants, the level and the general trend of the productivity of labor are reflected almost equally. If there were some discrepancies, they were explainable by defects in accounting. Fluctuations in labor productivity over the years were connected with fluctuations in the productivity of the main crops.

Consequently, said the reporter, we can and should use these methods, though they are not perfect. But in order to determine more exactly labor productivity on collective farms, it is first of all necessary to revise the measuring and planning of work on the collective farms. Along with measuring and planning the work in working days, it is necessary to measure and plan the work in man-hours and in man-days. Working days do not give a true picture of expended time. In the opinion of Comrade Kuzovlev, planning and measuring the work on collective farms in man days and man-hours is quite possible.

He then discussed in detail the growth factors in labor productivity and the problems of improving its measurement on collective farms. A well conceived system of measuring labor expenditures on collective farms, he stressed, is an important condition for the standardization of labor and determining the level of its productivity for the enterprise as a whole and in its individual branches. Finally, Comrade Kuzovlev made several practical suggestions in this field.

The report of J. B. Lapkes (All-Union Research Institute of Hydrotechnology and Reclamation) was devoted to the features of the methods of calculating labor productivity in agriculture in the USA. The main feature of this method lies in its broad utilization of the experience gained in the study of labor productivity in manufacturing. But the bourgeois methods of calculating labor productivity suffer from incurable defects. Bourgeois economists are interested essentially in the output per worker per time unit or in the expenditure of living labor per unit of production. And bourgeois political economy is afraid of the labor theory of value, as of fire. Bourgeois statistics avoid analyzing the expenditures of capital and the conditions of production in the calculation of labor productivity. Finally, the calculation of labor productivity by the output of the gross and especially by "conventional net" product per unit of living labor considerably exaggerates the level and the tempo of growth of labor productivity.

The reporter showed that the published statistical indices of labor productivity in US agriculture by homogeneous or by diverse comparable products per unit of living (concrete) labor spent, present an exaggerated picture of the level and movement of labor productivity. These data do not show the economic significance of the development of the productive force of labor by the introduction of technical innovations and improvements in the methods of production.

But, at the same time, Comrade Lapkes noted that a critical understanding of the experiences in the studies of labor productivity in agriculture of the capitalist countries is very important for carrying on similar research in the USSR. For this it is not enough to arrange for a workable measurement of labor expenditures. A systematic and profound study of the problems of labor productivity through the selection of typical state farms, collective farms and MTS in the basic economic regions of the country and in the main branches of agriculture is imperative. Therefore it is necessary to organize a profound, detailed study on the problems of labor productivity and, in particular, its dynamics in different regions and different branches of agriculture and at the principal stages of agricultural development in the USSR.

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During the discussions that followed, Academician S. G. Strumilin spoke. He said that in the reports, presented to the session, in spite of the differences of opinion, one could feel a certain mutual understanding of the main problems that were discussed. Agreeing with the basic points of the report of Comrade Karnaoukhova, Academician Strumilin indicated his divergence on some particular questions raised in that report.

One of them is the question of the duration of the entire working year in days. If we agree on 290 days, then this is actually the calendar year minus the holidays and leave-days, i.e. the duration of the working year on condition that there are no days of absence, even for valid reasons. But in agriculture there ar forced days of idle standing and absence from work, for instance in connection with weather conditions. Meteorological d indicate that for the summer months alone precipitation occurs on the average on 75 days, and heavy precipitation, when the entire working day is lost, not less than 18 days. If we take into account leave-days, not only sick-leave, but also days off on account of pregnancy, etc., then as a matter of fact the working year in agriculture consists of no more than 244 days.

It should also be noted that the index of gross production proposed by Comrade Karnaoukhova, as a matter of fact is the index of the gross turnover, as the fodder is not excluded from the calculation of gross production. This makes the proposed method not comparable with the method applied in industry.

In order to calculate the productivity of labor correctly, it is necessary to consider completely the outlay of living and past labor. This does not mean that these outlays have to be accounted for in every collective farm. Individual enterprises are interested in the local productivity of that living labor that is occupied in their economy. For them it is necessary to measure the productivity of living labor, i.e. the output per worker. But one cannot forget the interests of accounting the productivity of labor on a larger scale—in the branches and the economy as a whole. Thus, the basic document must be the account of the expenses on production, including not only the data on material outlays and the outlay of living labor, but also the data on the whole cost. The general output of product should be expressed in actual prices, on condition that those prices could be selected from those which are closest to the value. Academician Strumilin considered that these prices are the purchase prices.

Pointing out that the productivity of labor in agriculture can be calculated only on the basis of measuring the combined expenditures of the collective farms and the MTS, and explaining the method of obtaining the necessary indices, Academician Strumilin discussed the problems of evaluation of living labor in the collective farms. There are two points of view on this problem: some economists consider that the living labor of the collective farmers should be evaluated by the actual payments per working days, i.e. they identify the actual income, received by the collective farmers, with the payment for their work. Other economists consider that it is more proper to evaluate living labor by the norms of the wages corresponding to the categories of workers in the state sector of economy. The actual payment should be considered, but one should differ betwe income and the wages. The first includes, for instance, the differential rent, but to include it in the payment for work means to distort the idea of expenditures on production. With such a method used, we find that in the best, economically strong ente prises with high incomes per working day, the expenditures on production are high, while in the worst, economically weak collective farms with low payments per working day, they are considerably lower.

I. E. Kantyshev (Institute of Economics, USSR Academy of Sciences) discussed some methodological problems of calculati the productivity of labor in the state farms. He proposed to include in the system of indices reflecting the level of achieved economic development, the productivity of living labor, as well as the output of the gross or traded product, the expenditure of labor and the output of combined product per worker for the state farm as a whole, the net income (or loss) per each hundr rubles of expenditures and per 100 rubles of fixed (basic) resources. All these indices are taken for every 100 hectares of the whole farm land or of arable land. Such a system would meet the purposes of long-range and annual planning, of the operating management and financial activity of the state farm,

well as for the introduction of economic accounting.
Admitting that it would be theoretically better to calculate the
oductivity of labor in agriculture by the gross product, Com-
le Kantyshev nevertheless proposed using, for the calculation
productivity of labor in the economy of the state farms as a
ole, the index of the combined production of commodities in
ation to one average yearly worker, expressed in prices on
ivery to the state. The advantage of such a determination
the productivity of labor is that in this case duplication of
ounting the outlay of labor on producing fodders is avoided,
oes not appear in the gross product of plant-growing and then
er again as a part of the gross product of livestock breeding.
en the calculation of the productivity of labor is done for the
te farm as a whole, such a duplication should be excluded
m the combined gross product.

The productivity of labor in individual branches of the state
m should be expressed in natural indices (in centners per av-
ge worker of the given branch, converted into man-days and
n-hours). The auxiliary indices of the productivity of labor
e great importance for the calculation of its expenditure per
t of work performed: in plant-growing the outlay of labor per
hectare of arable land, according to the types of work, and
ivestock breeding, the number of various species of livestock
relation to one worker. These auxiliary indices are used in
nning the demands for labor and labor-force in diverse
iods of work for the entire state farm and its branches. On
s basis the schedules for using the labor force on seasonal
s (sowing, haying, harvesting, etc.) are prepared.

. I. Seminov (Institute of Economics, USSR Academy of
ences) concentrated on the problem of calculating the gross
put of product in kind in livestock raising, carried on on the
is of the data accumulated during the study of the activities
number of collective farms in 1953-1955, and on the docu-
nts of a large group of state farms. The proposed method of
culation of the gross output takes into account the over-weight
he livestock in relation to the weight recorded; the weight of
milk, not in actual content of fat, but in standard content;
also recommends the classification of livestock by the co-
cients of their weight. For the specialized farms (of cattle,
) the productivity of labor can be determined directly in
ural indices, without using any prices for the comparison of
duction.

I. Khrimlian (Institute of Economics of the Armenian Acad-
of Sciences) singled out as important the proposal of
demician Nemchinov on the determination of the require-
nts of the expenditure of labor as one of the methods for study-
the factors involved in the growth of the productivity of
or in agriculture. In the Armenian Republic, utilization of
method, when working on placing of agricultural enterprises
assigning specialization, gave good results. Comrade Khrim-
discussed the peculiarities of the development of agricul-
in the Armenian Republic and underlined that the achieve-
t of a considerable increase in agricultural production, and
sequently the raising of labor productivity, is closely connect-
with measures for securing greater material incentives for
collective farmers. In connection with this he said that the
ting prices not only are not able to stimulate their develop-
t in certain branches of economy, especially in livestock
eding, but even do not reimburse the expenditures in such
nches. Therefore changes are necessary in the spirit of the
ommendations concerning the establishment of uniform
es, based on the social expenditures on production, which
e advanced at the conference on the law of value and its use
he national economy of the USSR, in May, 1957.

K. Sokolovsky (Institute of Economics of the Polish Academy
ciences) conveyed to those participating in the session the
mest regards from the Polish economists and expressed the
re that the results of this conference would find practical
ication as soon as possible. He stated that the labor and the
lusions of this conference will have great influence on the
lopment of the agricultural sciences in Poland and other
ntries of peoples' democracy. Noting the growth of labor
uctivity in the agriculture of Poland, he made several criti-
remarks about the combined index, the use of which
ot liberate economists from the necessity of a thorough
ysis of the conditions of production in agriculture or
the agricultural economy in a region, province, etc.

As an illustration, Comrade Sokolovsky gave some examples from the practice of calculating the productivity of labor in a number of individual enterprises in Poland.

Professor S. I. Kutikov (Ukrainian Institute of Livestock Raising) devoted his remarks to the analysis of the cause of comparatively low profits from livestock raising in a number of collective farms in some zones of the Ukraine. He noticed that the questions of profitableness and productivity of labor are closely connected. The successes in the field of decreasing the outlay of labor should be evaluated not only by a comparison with the old indices or data of other enterprises, but also in comparison with the level of the outlays of labor, which secure profitableness in the production of a given type of product. The analysis of the productivity of labor, making such a comparison, would be an effective means in the struggle for strengthening the economy of a collective farm.

D. I. Kosko (the Scientific Research Institute of Sheep-Breeding) spoke about the necessity of regulating the prices for the products of agriculture (meat, wool, etc.) in order to create favorable conditions for the growth of labor productivity in the collective farms and the state farms.

V. P. Rojin (Institute of Economics, USSR Academy of Sciences) discussed the experience in calculating the working time of the collective farmers and workers of the MTS tractor brigades. In the Budenny and Krupskaya collective farms (Krasnodar territory) the calculation was based on a count of the days of appearance for work up to one-half and one-quarter of a day, instead of the calculation, recommended by the Ministry of Agriculture and the Central Statistical Administration of the USSR, when any appearance for work, even for one or two hours, is accounted as a whole working day.

So long as only the working days were accounted in these collective farms, the losses and shortcomings in the economy were explained by the shortage of labor power. But the calculation of working time showed that these explanations have no foundation. Comrade Rojin presented facts which testify to the practical role of calculating the expenditure of the labor-time per individual crops and different types of work. In the Krupskaya collective farm the farmers were reluctant to appear for gathering corn. Accounting helped to find the reason for it. It was revealed that in spite of much labor required by this work, the working days were calculated for it at a lower rate than for the work on gathering other crops (for instance, sunflowers and hemp). Measures taken at the proper time helped to correct this situation.

Accounting per working hours is the most progressive form for calculating labor spent. It is a considerable factor stimulating more complete participation of farmers in the work performed by the production team.

Another question discussed by Comrade Rojin was related to the calculation of working days of the MTS tractor brigade workers where there is usually a large percentage of administrative and supervisory personnel. In spite of this, the calculation of and control over the quality of work is organized badly, and the calculation of working time still worse. The unsatisfactory system of evaluations and norms is reflected negatively on the utilization of the working time of mechanizers occuped by work in the collective farms. Comrade Rojin considered it necessary to calculate, along with the accounting of work of the tractor driver on the basis of normal shifts, also by the actual performed work in labor days up to one-half and one-quarter of the working day and wherever possible even in hours.

K. N. Nurmatov (Institute of Economics, Academy of Sciences of the Uzbek SSR) devoted his contribution to the method of calculating the productivity of labor in the cotton-growing enterprises in connection with the use of the system of planting cotton in square clusters with a narrow space between the rows, allowing mechanized cultivation in two directions. Applying such a method, the crop capacity of cotton and the productivity of labor are considerably raised.

The specific peculiarities of cotton-growing, said Comrade Nurmatov, compel us to calculate the productivity of labor proceeding from the volume of the gross product of cotton growing and other crops per average yearly worker, the expenditure of labor per centner or ton of raw cotton or the production of other crops of the cotton-combine per man-days. In the regions of irrigated land it is also necessary to account the average harvest in relation to each hectare. Such a simple and concrete calculation facilitates a more complete utilization of the labor resources in the cotton growing economy.

T. S. Mityushkin (Ministry of Agriculture of the USSR) noted that the productivity of labor is closely connected with the proper utilization of working time. He presented data which showed that in the MTS considerable labor reserves are still not utilized. Admitting the necessity of preparing calculations of labor on the basis of the extensive use of statistical and normative methods, Comrade Mityushkin considered at the same time that it would be useful to improve the method of calculating the amount of labor required for the performance of specific work.

Comrade Mityushkin devoted a considerable part of his speech to the discussion of the debatable point—can the collective farms and state farms compete with one another, and if so, how should the gross product be calculated and how should the differential rent be taken into consideration? In his opinion, in such a case the prices on delivery by the state farms (without subsidy) should be taken as the basis, for in them the differential rent is taken into consideration. The output of production, expressed in such prices, more correctly reflects the productivity of labor.

G. S. Klochko (Moldavian branch of the USSR Academy of Sciences) stressed the necessity of a clear definition of the conception of the productivity of labor and that it should not be confused with the intensity of labor. Productivity of labor is the ability to produce a certain amount of product or to perform certain work in a given unit of time. The intensity of labor is the amount of labor spent by the worker in a unit of time.

The amount of product produced by one able-bodied farmer (on hand or taking part in production), said Comrade Klochko, cannot be an index of the productivity of labor in the collective farms. In his opinion, it is wrong to calculate the productivity of labor per one yearly worker, including the working and the non-working days. This is not an index of productivity of labor. For its exact determination, it is necessary to calculate the time actually spent for work.

P. V. Gulian (Institute of Economics, Academy of Sciences of the Latvian SSR) discussed the role of mechanization of plant-growing in raising the productivity of labor. He acquainted the participants of the conference with the work on calculating the expenditure of labor for the cultivation and harvesting of all the basic crops, as well as for the entire economy of plant growing in the collective farms of the Latvian SSR under different degrees of mechanization.

To reveal the role of the mechanization of plant-growing in raising the productivity of living labor, said Comrade Gulian, it is not enough to limit oneself to showing the percentage of mechanization of specific or basic work. For that purpose it is necessary to study how the demand changes for the expenditure of labor on individual crops and on plant-growing as a whole under different levels of mechanization.

S. I. Meshchaninov (The Ural branch of the USSR Academy of Sciences) told about the experimental work on the increase of milk production of Tagil breed cows up to the level of 5,000 kg. during normal lactation, on the basis of rational use of fodder.

A. G. Kuzmina (East Siberian branch of the USSR Academy of Sciences) described the utilization of the labor force in the collective farms of Irkutsk province. She informed the meeting that after the resolutions of the Party and the government on raising agricultural production in the collective farms of the province there was an increase in the labor reserves. The farmers are no longer interested in leaving for town; just the contrary, an influx of the town people to the collective farms is taking place.

For the past three years in the province there has been a sharp increase in work contributed to the social economy of the collective farms. Thus, in 1956 70 million working days were registered, compared with 51.5 million working days in 1953. For the determination of the productivity of labor in the collective farms of the province calculations were made of the amount of product in natural terms per man-day. Since the length of the working day fluctuates as the result of the specific conditions of production, it is necessary to account working time in hours.

J. Prichinauskas (Institute of Economics, Academy of Sciences of the Lithuanian SSR), speaking on the reserves for raising the productivity of labor in the collective farms of the Lithuanian SSR, underscored that for revealing the reserves it is necessary to calculate and analyze the indices of labor productivity in each collective farm. Then he acquainted the participants of the conference with the method of such analysis applied by the Institute of Economics of the Lithuanian Academy of Sciences. Under this method the state purchasing prices were taken as the basis for the evaluation of the production of the collective farms in money; the man-day served as the basic index in calculating working time; and for the calculation of the productivity of labor, not only the direct, but also the indirect expenditures of working days were counted. The experience of calculating by such a system showed that along with the direct, one should also use the indirect and auxiliary indices.

A. A. Fedotov (Saratov Institute of Finance) underlined the necessity of studying the dynamics of the growth of labor productivity for determining its indices. The calculation of the productivity of labor, he said, can be carried on in a most rational way on the basis of developing bookkeeping accounting. For the calculation of the productive force of labor and its output what is needed is an accounting of the output, of the working time, number of workers, of the acreage under cultivation, the capacity of crops, the number of livestock and their productivity, and the area and number of livestock that have to be attended by one worker.

B. S. Burbayev (Academy of Sciences of the Kazakh SSR) gave a talk on "The Economics of Raising Young Animals and Fattening Livestock in the Grain-Producing State Farms of the Five Northern Provinces of Kazakhstan." He showed how, in these state farms, it was possible to increase the weight of the livestock through increasing the utilization of the tillage workers during winter.

D. I. Dumnov (Central Statistical Administration of the USSR) observed that this conference has been very important for finding a solution to many debatable problems. Among them he included the determination of the indices of labor productivity through the gross product per average yearly worker and the work days spent on agricultural production, as well as the determination of natural indices of the productivity of labor in man days. Comrade Dumnov underscored the importance of theoretical substantiation given by Academicians Nemchinov and Strumilin.

Then Comrade Dumnov characterized the indices of the productivity of labor used in the Central Statistical Administration of the USSR and in local statistical organs. He observed that in calculating the productivity of labor many difficulties of a theoretical and practical character are still found.

B. V. Kniazevsky (Financial-Economic Institute of Rostov-on-Don) proposed a compulsory study of the expenditure of labor required by the cultivation of various crops because this would facilitate the determination of changes in the productivity of labor. In his opinion, it is necessary to separate in accounting the indices on five or six main crops, along with the combined indices for the whole economy, in order to be able to judge in this way what changes in the productivity of labor also occured on other crops.

J. B. Kvasha (Institute of Economics, USSR Academy of Sciences) spoke about the expediency of calculating the indices of labor productivity by the gross product method in the collective farms of the entire zone served by the MTS. This does not exclude, of course, the calculation of the productivity of labor for individual collective farms along with the utilization of indices of the capacity of certain crops and the output of livestock breeding per 100 hectares. Aside from this, the systematic all-round calculation of labor productivity should be included b the method discussed by Academician Nemchinov. All these types of accounting could be done by the MTS for the entire zone served by it, as well as for individual collective farms.

In the opinion of Comrade Kvasha, the index of labor productivity should be calculated on the basis of the labor expenditure of all workers, not only the farmers. The proposal to calculate the work of farmers in man-hours is not required by

actual situation, for even in industry there is no such ac-
nting. J. Kvasha also opposed the passion for determining
outlays of previous labor when calculating the productivity
labor, for this leads away from the concrete, operational tasks
calculation and planning in this field.

. A. Semyonov (the State Planning Commission of the USSR)
oted part of his discussion to the normative method of study
abor productivity in agriculture and the possibility of apply-
it in planning.

he basic difficulty for using it, he said, is the absence of
ounting labor expenditures per types of work and crops under
erent methods and agro-techniques in the collective farms,
te farms and MTS. Without this accounting we cannot estab-
the effectiveness of mechanization and the role of other
tors in raising the productivity of labor in agriculture. The
posal of Academician Nemchinov is acceptable only for a
ited number of economies, but is not practical on the scale
n entire province, territory or republic. For determining
data by this method an enormous number of people would be
ded to work on accounting. This would sharply lower the
ctiveness of the results obtained from such a study of labor
ductivity. Extending the data on actual labor expenditure
eived for some agricultural enterprises to all of them, would
ult in unrealistic conclusions.

. G. Glinyany (Institute of Economics, USSR Academy of
ences) spoke on methods for uncovering reserves for raising
productivity of labor in cotton-growing state farms. Observ-
that the calculation of labor productivity in agriculture is
plicated by a number of specific peculiarities, he said that
cotton-growing the most exact method of calculating the pro-
tivity of labor is by the output of product per one working day
ctual work or per one average yearly worker, if it is con-
red that he is accomplishing work assumed to be 290-300
king days. Comrade Glinyany also underlined that it is high
to introduce in the state farms accounting of direct expend-
es of labor in man-hours. This is especially important for
on-growing, where expenditure of labor employed from the
ide is great, though many outside workers do not work a
day and their labor productivity is considerably lower than
of the permanent workers. He proposed, in particular, to
blish coefficients, uniform for the entire USSR, for convert-
man-days into man-hours, on the basis of permanently
blished observations, in order to compare the work of the
ide help with the work of permanent workers.

hen calculating the productivity of labor in all branches and
e economy of the state farms, there arises the problem of
parable prices that have to reflect, as exactly as possible,
cost of production and the accumulation necessary for the
e farms. In the opinion of Comrade Glinyany, such prices for
state farms should be the delivery prices of 1956. He pro-
s to determine the prices on products, for which the prices
not then established, by the average cost of production in
he state farms of similar types for the by-products by the
of gathering, and for the unfinished products—by the
age cost per each type of work in the entire USSR in 1956.
the narrowly specialized economy of those state farms
e 80-90% of the cost of production falls on cotton completely
erable to the state, it is proposed to use a simplified
od, based on the output of commodities expressed in their
e. Finally, Comrade Glinyany said a few words on the re-
es for raising the productivity of labor in the cotton-growing
rprises and on certain defects in accounting.

S. Sysdykov (Institute of Economics, Academy of Sciences
e Kazakh SSR) spoke on the reserves for raising production
vestock-breeding in the collective farms located in desert
ons (giving examples of the collective farms of the Magni-
sky and Shevchenkovsky regions of Guryev province). The
rtant reserves for the increase of labor productivity in
farms, he considers, are the rational utilization of the avail-
natural fodder-growing lands, keeping the herd on the pas-
for practically the entire year, and also a better distribu-
and organization of land utilization by territorial pasture
lexes, and the concentration of the productive activities of
ollective farms on a compact territory. Another consider-
reserve for raising production is the specialization of the
ctive farms on raising the most adaptable and productive
livestock in local conditions, with a proper combination of different branches of livestock breeding.

A. N. Nikiforov (The Moldavian branch of the USSR Academy of Sciences) spoke about the solution of the task to overtake and surpass the US in the near future in the production of meat, milk and butter. Having observed that Moldavia already had surpassed the US in 1956 in the production of milk per 100 hectares of farm land, he criticized many leaders of regional and collective farms. In his opinion, these leaders are not paying enough attention to strengthening the basis for the further development of livestock production, in particular, to increasing the number of female animals, since the growth tempo of the herds is inadequate. Comrade Nikiforov considered it necessary to strengthen and improve the fodder base of Moldavia, first of all by liquidation of the deficit in vegetable albumen through extending the area under perennial leguminous plants (grass) and sharply improving their cultivation.

P. A. Timokhin (Moscow Institute for the Organization of Land-Exploitation) said that the category of labor productivity has a different concrete expression in the collective farms, MTS and state farms. In his opinion, it is wrong to try to find a general method for the calculation of labor productivity. The method should be related to the problems under study. In particular, for the economic analysis of production in the collective farms and determination of differential rent by means of the annual reports of the collective farms, the productivity of labor should be calculated through the gross product and gross income per unit of labor, and at present—per working day. He did not agree with Comrade Karnaoukhova on the problem of evaluating the product that has to be delivered to the state. Comrade Timokhin proposed to evaluate this part of production not by the prevailing price on realization, but by the purchase price. By means of the purchase price, he also proposed to evaluate the product applied to the needs of the collective farms themselves, and also distributed by working days.

A. A. Garmash (Institute of Economics, Academy of Sciences of the Kirghiz SSR) told about the influence of the form of payments for work performed in the collective farms on the rise of productivity and increase of production of agricultural products according to the experience of the Logvinenko collective farm in the Kyzyl-Asker region of Frunze province in the Kirghiz SSR. In that collective farm, they started in 1956 to pay for labor according to the amount of product produced. He cited a number of facts and figures showing the effectiveness of this system of payment for labor under conditions of irrigated tillage, where the harvests are steady even in unfavorable years. In conclusion, he discussed some problems of calculating the productivity of labor and suggested taking into account, when determing the revenue from the realization of products delivered by contract on delivered prices, also the special advantages and income from the delivery of these products.

M. I. Lola (State University of Vilna) approved the point of view of Comrades Nemchinov and Karnaoukhova on the problems of calculating the productivity of labor. At the same time, he took exception to the proposals made by some economists to liquidate the use of working days. Showing the difficulties connected with the replacement of a system of payment by labor-days the wage system, he underscored that one may talk about the transition to wages and the distribution of profits only as an experiment in a limited number of collective farms.

D. S. Kolpakov (Institute of Economics, USSR Academy of Sciences) declared that the absolute index of productivity of labor is the sum of the living labor and the labor embodied in commodities per unit of product. To economize on living labor in every possible way is most important for the national economy and especially for agriculture. Therefore it is quite necessary to work out and improve the scientifically substantiated method of calculating the expenditure of living labor and to calculate its productivity. At the same time it is known that the growth of the productivity of living labor, as a rule, is conditioned by additional outlays of the labor embodied in commodities. When trying to economize living labor, one should not forget also about the necessity of economizing material expenditures; one should not fail to consider the cost of economy in living labor. Underestimation of that sometimes results in errors. For instance, in our press it is recommended to use a special kind of paper for protection of vegetables' shoots, technical crops and potatoes, as an economically sound method. But the estimates which were published not only exaggerate the economy of living labor as a result of this method, but give no data on the expenditures of labor embodied in the commodities. Yet this method is closely connected with the expenditure of paper. To protect the entire area under technical crops, potatoes and vegetables, one would need five times as much paper as is produced in the entire country. Is it not high time for those authors to stop recommending new methods before their advantages and practicability are economically proved?

Having devoted a considerable part of his remarks to the reserves and factors of raising the productivity of labor, Comrade Kolpakov argued against those economists who expressed doubts about the practicability of calculating the productivity of labor on the basis of taking into account the outlays of living labor and the labor embodied in commodities. At the same time he made some remarks on the method of calculation on the basis of accounting the expenditures of living labor.

M. M. Makeyenko (State University of Kishinev) discussed the role of the quality of production on the productivity of labor in the collective farms. He showed the great importance of the improvement in the quality of products in the struggle for the further increase in the productivity of labor in agriculture. A higher quality of product leads to economy in expenditure of labor and materials per unit of product; it is equivalent to the increase in the volume of production and is one of the factors for raising the productivity of labor. Thus, by tentative data, in 1957 the productivity of labor of the collective farmers in the Moldavian SSR increased not less than 4.2% as a result of the broad application of the method of separate harvesting of winter wheat, which heightens the quality of the grain (this allowed lowering the expenditure of labor for the final work on it and for transportation).

N. G. Karotamm (Institute of Economics, USSR Academy of Sciences) touched on questions of labor productivity in US agriculture. In the report of Comrade Lapkes, he said, it was indicated that in the US the expenditures of living labor for the production of a unit of product were calculated on the basis of equivalent man-hours of an adult worker skilled in performing various agricultural work on the largest and most advanced capitalist farms. These normative expenditures of labor were calculated on the basis of the data of experimental stations and scientific-research organizations in the US. Comrade Lapkes observed quite correctly that the data on the productivity of labor, received in this way, are exaggerated in comparision with the average level of labor productivity in US agriculture. But, unfortunately, he did not attempt to check on the calculations made by the American economists—R. B. Hecht and others.

Having examined critically the figures on the growth of labor productivity in US agriculture given by the American economists, Comrade Karotamm demonstrated on the basis of the data taken mostly from American sources and reflecting the situation in US agriculture as a whole, and not only a part of the advanced large-scale capitalist farms, that the American economists are embellishing the actual situation with regard to the growth of labor productivity in US agriculture. Such an embellishment of the real situation is observed in the calculation in the US of the production of the leading types of agricultural production in relation to 100 hours of working time of a skilled adult worker (average for the year) as well as in relation to one worker occupied on the farm (members of the family of the farmers plus hired workers) and also per one present farm-hand of 15-60 years of age, and finally, per every person of the farming population (average for the year).

The Soviet economists, said Comrade Karotamm, should develop an all-sided examination of the productivity of labor in U agriculture in order to work out scientifically substantiated indices for the comparison with the productivity of labor in agr culture in the USSR with that of the US on the basis of massive data. In conclusion, he presented and analyzed figures on annu agricultural production in the US as an average for 1951-1955.

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The solution of the problem of a considerable increase in the production of agricultural products in our country is closely co nected with the necessity of lowering by every means the expend iture of labor per unit of product. This problem is being solve in organic connection with the working out of the most effective method of calculating the productivity of labor. On the pages o the magazine "Problems of Economics" a discussion has been conducted over a long period on questions of the methodology o calculating the productivity of labor. This scientific conferenc in essence, summed up the basic results of this discussion and permitted a uniform point of view on a number of most important questions to appear. The conference also accomplished a considerable amount of work on the critical selection of the most favorable method of calculating the productivity of labor.

The fruitful discussion and the proposals made by the participants cited all the reasons for a transition from the lengthy discussion of debatable questions directly to the practical working out of a uniform method of calculation of the productivity o labor in agriculture and to its introduction in the state farms, collective farms and MTS.

The conference helped to pose a number of urgent questions, first of all the question of reserves and factors for raising the productivity of labor. As it is known, in this field a great influence is exerted by several factors, among them the materia interest of the working people in the results of their toil, the development and perfection of methods and technology and the organization of production, including the rational organization of accounting. Those participating in the conference gave som valuable data on the best utilization in agriculture of these factors. The application of this experience, taking into account the peculiarities of different zones, republics, provinces and regions, could be of great benefit.

The contemplated radical changes in the technique and the organization of agricultural production, undoubtedly will secur in the near future a considerable increase in the productivity of labor. This will also be promoted by the swiftest practical utilization of the results of this conference.

EDITORIAL COMMENT

The editorial board considers as essentially correct the poi of the reports of Professor Karnaoukhova, "Methods of Calculat ing Productivity of Labor in Agriculture," and of Academician Nemchinov, "Methodological Problems in the Study of Factors of the Growth of Labor Productivity in Socialist Agriculture." In the above survey, some very useful recommendations are included for the practice of calculating the productivity of labo in agriculture. By publishing this survey, the editorial board sums up the discussion of this problem carried on the pages of this magazine.

. Bakumenko and I. Kachalov

orty Years of Development of Socialist conomics

For the 40th anniversary of the Great October Socialist Rev- ution a collective work, “Soviet Socialist Economics, 1917- 57,” was published. It was prepared by the Institute of Eco- mics, USSR Academy of Sciences. This book brings together e experience of building a socialist economy. In it are ana- zed the problems of development of the socialist economy at e present stage and the perspectives of its further develop- ent. In the articles included many different problems are dis- ssed, covering all aspects of socialist reproduction. Readers this collection of articles will find in it much of value and portance for the better scientific understanding of the vital oblems of economic development of Soviet socialist society. this book the great advantages of the socialist system, in mparison with that of capitalism, are set forth.

The book begins with an article by L. M. Gatovsky, “The undations for Constructing a Socialist Economy in the USSR.” characterizes the profound upheaval, accomplished by the Oc- ber Revolution in social life and economic relations. Having ened free scope for the development of the productive forces, e revolution demonstrated in practice the great advantages of e new social order — of socialism. The revolution completely spersed the myth about the eternity and stability of private operty, about the inability of the working people to manage ate affairs and economics.

The article is devoted to an analysis of the measures for the nsition to socialism and their realization under the condi- ns of our country. The author dwells on the theoretical theses Marxism-Leninism and Lenin's plan of building socialism, on e basis of which the heroic Soviet people, under the leader- ip of the Communist Party, in the shortest historical period, complished the industrialization of the country, solved the ost difficult problem of collectivization of agriculture and hieved a cultural revolution.

The forty years that elapsed since the October Revolution present an epoch consisting of two almost equal historical riods. Characteristic of the first twenty years is the revolu- nary transformation of capitalism into socialism, the estab- hment and strengthening of the socialist order. The second enty years was the period of the further development of vic- ius socialism and gradual advance to Communism.

At all the stages of socialist construction, the Party applied d creatively carried out the Lenin plan of building socialism, operly taking into account the concrete conditions and pecul- ities of the development of the Soviet country, the level of productive forces, the unprecedented nature ofeconomic forms, class relations, and of the domestic and international situation.

In the article, questions of the origin and establishment of the onomic laws of socialism are discussed, their operation dur- the transition period. The author underscores the world- le historical meaning of the experience of socialist construc- n in the USSR. Utilization of this experience permits at the esent stage, solving in a satisfactory manner the problems of velopment of socialist economics in the people's democ- cies of Europe and Asia, taking into account the histor- l and national peculiarities of each individual country.

L. M. Gatovsky in his article criticizes the reformist and re- ionist theses on the possibility of peaceful and spontaneous velopment of capitalism into socialism. In the article the role the Party and the Soviet state in achieving Communist con- uction is indicated. There is also a discussion concerning the ation between the basis and the superstructure and the pro- ctive relations and productive forces in the transition period m capitalism to socialism.

he article of I. A. Gladkov, “The Planned Development of iet Economics,” is devoted to the problems of theory and practice in planning in the USSR. The author illuminates the basic stages of development of the planned economy in the USSR. In the spring of 1918, the Communist Party started working out the plan for electrification of the country, according to the advice of V. I. Lenin concerning the necessity for developing by all possible means the heavy machine industry and the electric power industry as the base for the socialist transformation of the total national economy. This work was completed in 1920 by the famous GOELRO plan. I. Gladkov observes that the plan of electrification formulated under the direct leadership of Lenin, is a model of a scientific plan. The basic principles and tasks of the Lenin plan for electrification received more concrete form and development later on in the five-year plans of economic and cultural construction. In the article a brief account of these plans is given. The material used clearly demonstrates the struggle of the Communist Party for improvement in the methods of planned guidance of socialist economics in the process of economic construction. The author discusses in detail the problems of the reorganization of management of the national economy, designed for the realization of Lenin's principles of democratic centralism in the construction of the economy.

In connection with the reconstruction of the management of the economy on the territorial principle, particular importance was placed on planning in the union republics and in the other republics of the USSR on the basis of economic-administrative regions. The new tasks of the economy demand a radical change in long-range and current planning, guaranteeing a more correct placing of production, mastering and developing the large deposits of various raw-materials and sources of energy, and establishment of new enterprises and centers of industry. On this basis the Party and the Government decided to work out a perspective plan of development of the national economy for 1959-1965. The new perspective plan must give wide scope for mastering and developing the natural resources of the eastern regions of the country, rapid development of the entire national economy to a higher level and, on this basis, the further improvement of the material well-being and cultural level of the Soviet people. The plan represents an important step in solving the main economic problem of the USSR.

In the article of A. I. Notkin, “Founding and Development of the Material-Production Basis of Socialism in the USSR,” it is shown how, as a result of the heroic efforts of the Soviet people under the leadership of the Communist Party, the Lenin plan for the construction of the economic base of socialism was realized.

Having characterized with specific material the level of development of the productive forces in pre-revolutionary Russia, the author noted that the branch structure of the national economy on the eve of Great October did not correspond to the needs of development of large-scale modern machine production. In order to create, under those conditions, a material-production base of socialism in the USSR, it was necessary, taking advantage of the new socio-economic order, to secure the victory of large-scale machine production in the entire national economy, to transform radically the structure and the technical base of the whole social production in towns and villages, and to create adequate cadres, capable of operating and developing modern technique.

The Soviet people, as a result of the realization of industrialization of the country and collectivization of agriculture, created the material-production base of socialism; socialist large-scale production became the general form of production in the USSR. It enveloped almost all the branches of social production. Socialist society began to develop on its own production basis.

Having built a socialist society, the toiling people of the USSR started to construct the material-production base for Communism. The construction of that base, writes the author, is inseparably connected with the new technical revolution, the main content of which is in the complex automation of production on the basis of the widest utilization of electric and atomic energy, electronics and chemistry.

Academician S. G. Strumilin contributed an article to the collection under discussion entitled “The Productivity of Labor in the USSR During 40 Years.” This article is rich in specific material. The computations and tables included in it characterize vividly the enormous progress of Soviet economics and the advantages of the socialist methods of raising the productivity of labor compared with those of capitalism.

The first imperialist World War intervention and civil war resulted in the situation that, in 1920, our factory and qualified workshop industry produced only 1,410 million rubles' worth of product, and the output per worker was 1,153 rubles (in 1926-27 prices). By the end of the reconstruction period, in 1927, production rose to 12,679 millions' worth of product (compared with 7,003 million rubles in 1917), and the yearly output per worker was 4,783 rubles, i.e., increased 77% if compared with 1917. For the following decade (1927-1937) industrial production increased almost seven-fold, and the output per worker – 156% (p. 126). Such a growth for one decade, writes S. G. Strumilin, is a jump unparalleled in the history of the development of world economy. It is not enough to call the reconstruction of Soviet industry, achieved in the first five-year plans, "a technical revolution, for at the same time it was the threshold, by crossing which we entered into the first phase of Communism, i. e., completed the most important stage of social revolution" (p. 127).

During the period of reconstruction the lowering of the expenditures of labor per unit of product occurred in the USSR four times as rapidly as in the most developed capitalist countries. But still, the level of labor productivity in the USSR remained, by 1937, insufficiently high; it was 40.5% of the level of labor productivity in the US (in 1928 — 16.2%, in 1932 — 26.2%). In the opinion of Academician Strumilin, the main reason for such a lagging behind was in the different supply of energy per worker in the US and the USSR. The established horse-power of the motors per one worker in 1937 in the USSR was two or three times lower than in the US. In the next twenty years (1938-1957) industrial production in the USSR increased 5.7 times, and output per worker three times. During the decade after the war (1947-1957) production increased 325%, rising annually 16%, while in the US the average annual growth of industrial production (in stable prices) did not surpass 3.3% (p. 133). This is a clear proof of the advantage of the USSR and a pledge that our country will overtake the U.S. in labor productivity in a short time.

The article of V. I. Veitz, "Electrification of the National Economy in the USSR," contains vast factual material about the development of Soviet electric power. Following the instructions of V. I. Lenin on electrification, as the basis for lifting the productive forces of the national economy to a higher technical level, the Soviet people achieved enormous results. In 1913 Russia occupied the fifteenth place in the world in production of electric energy. Before the Great Patriotic War, the Soviet Union advanced to the third place, and after the war, to the second place in the world, having considerably outstripped in that respect the principal capitalist countries of Europe. But in the output of electric energy and in the level of electricity supplied to the economy the USSR still is behind the US. While much was done to reduce this gap, we still produced in 1956 4.4 times less than the US per capita of population.

The high tempo of annual increase of electric energy production in our country will permit the USSR to overtake and surpass the US in the field of electrification. In closing, the author stressed that the results of electrification and its perspectives in the USSR serve as a brilliant and convincing proof of the triumph of Lenin's teachings on socialist electrification.

In the article of J. A. Kronrod, "The National Income in the USSR," the national income of the socialist society is analyzed, including the sources of its growth, the character of distribution and utilization of the national income of the USSR. The author reveals the groundlessness of the definition of the national income as the sum total of the individual incomes of all the members of the society, independent of the character of the source of it, as promoted by the bourgeois economists. J. Kronrod underlines that bourgeois political economy is trying to hide exploitation and strives to prove that any activity of people under capitalism is productive.

The author presents data on the rapid growth of the national income in our country during the years of the Soviet regime. During the First and Second Five-Year Plans the average yearly tempo of growth amounted to 16%; during the years of the Third Five-Year Plan — 10%; during the Fifth Five-Year Plan 11%, and during the Sixth Five-Year Plan they are expected to be about 10%. By the end of the Sixth Five-Year Plan the level of production of national income is expected to be 4.5 times as large as in 1940. Thus the high tempo of economic production is peculiar to the socialist economy, and this tempo remains stable and continues every year. Nothing of the kind occurs and cannot occur in the capitalist countries. This is one of the main advantages of socialism in comparison with capitalism.

L. A. Leontiev contributed to this collection an article on "Th Economic Competition between the Two Systems and the Basic Task of the USSR." The author reminds us of the initial materi productive position from which socialism started the economic competition with capitalism. This allows him to present vividly the formidable jump which was performed by the Soviet people during the period of existence of the Soviet regime in order to solve the aim set by V. I. Lenin, to overtake and surpass the advanced capitalist countries in the economic sense. The tempo of the economic development of our country was approximately ten times higher than the tempo of development of the principal capitalist countries. By 1937 the USSR advanced to the first pla in Europe and second in the world in the absolute output of its industrial product. The achievements of the USSR in solving the main economic task would be much higher if not for the destructive wars which inflicted enormous damage to the Soviet econom At the same time the US not only had not suffered from the two world wars, but, just the contrary, got rich on the blood and suffering of other peoples.

The task of overtaking the US and other advanced capitalist countries in the production of product per capita will demand a certain amount of time and great efforts on the part of the Sovie people. While the gap between production per capita in our country and the US is narrowing, still for the basic types of industrial products it is up to now considerable.

Thanks to the appearance of the world system of socialism af the Second World War, the economic competition entered a new historic phase. At present the share of the socialist camp in wo industrial production amounts to 30%, and that includes more th one third of the world's production of coal, one fourth of the worl smelting of steel, and about one sixth of the world's production electricity.

In the collection there is an article by A. A. Arakelian on "Th Development of Socialist Industry in the USSR." In it, it is show how the Communist Party and the Soviet Government, in spite the hindrances of the enemies of socialism, undeviatingly and decisively carried out the Lenin policy of industrialization of the country, how, as the result of selfless efforts of the toiling peop the Soviet Union was transformed from a backward agrarian country into an advanced industrial one. This was achieved on the basis of preferential development of heavy industry. During thirteen years (1928-1941) into that industry was invested the enormous sum of 147.4 billion rubles — i.e., 50% of all the capital investments in the national economy of the USSR in those ye

Socialist industrialization has radically changed the proportio in our national economy. If in 1913 the share of industrial production was 42.1% of gross production of large-scale industry and agriculture, by 1941 it was approximately three quarters of the entire production of the national economy. Great changes also occurred in the branch structure of industry. In the gross output of the entire industry the share of large-scale industry advanced from 33.3% in 1913 to 61.2% in 1940 and 70.8% in 1956. Especial rapid was the development of machine building, electric power a the chemical industry. The creation of heavy industry secured t rapid development of the branches producing consumption goods.

Socialist industrialization played a decisive role in the collectivization of agriculture and the establishment of complete domination of socialist forms of economy. It was the basis for liquidation of the economic and cultural backwardness of the national republics of the USSR. The creation of a powerful industry in our country allowed us to strengthen the economic independence of t USSR and to make its military might more powerful.

This aricle is not without some defects. For instance, in characterizing the process of industrialization of our country, A. Arakelian stresses mainly the quantitative side of this process and almost ignores the qualitative indices of socialist industry, eloped during the 40 years of the Soviet regime, while they ved to a considerable degree the advancement of the Soviet ion to one of the leading places in the world.

ne of the greatest victories, gained by the Soviet people, un- the leadership of the Communist Party, is the socialist nsformation of the village. To this problem is dedicated the icle of M. A. Krayev, "The Victory of the Collective Order in Agriculture of the USSR." In this article it is indicated that idea of the socialist transformation of agriculture through sants' cooperation was advanced by Marx and Engels. Sup- ting and developing this idea, V. I. Lenin laid the groundwork the principles of socialist peasant cooperation. The Lenin n for cooperation is a scientific theory of the socialist trans- mation of small-scale peasant economy to large-scale mech- zed agricultural production. In cooperation, Lenin saw the most acceptable for the peasantry for the transition to so- lism. The cooperative plan of Lenin was accepted by the mmunist Party as the general line for building socialism in village.

n the article of M. Krayev extensive material is generalized analyzed on the construction of Soviet economies and peas- cooperation from the first years of the existence of the So- t power.

n the article of T. A. Koval, "Socialist Agriculture of the SR on a Steep Ascent," the successes in the development of agriculture in the post-war period are discussed. The or- izational strengthening of the collective farms, the equip- nt of socialist agriculture with the new progressive technique, assignment to the collective farms of hundreds of thousands specialists, and finally the mastering of the virgin lands — all s allowed us to increase considerably all types of agricultur- production. The author presents many facts and figures that ve to prove the sharp increase in production of meat, milk technical crops. In 1956 the gross gathering of grain (har- t laid in the barn) increased approximately 20% if compared h that of 1955. For the last three years the output of milk e 35%, of meat — 11%, eggs — 21% and wool — 11%, etc.

he article of T. A. Koval has the character of a review and ot concerned with such important problems as the calcula- of the cost of agricultural production in the collective farms the problem of reducing costs by all possible means, not to ntion the organization of economic accounting in the collec- farms and the MTS. It is a serious defect that the author y inadequately characterized the role of the task laid down the Party, of overtaking the US in the near future in the pro- tion of meat, milk and butter per capita, and did not show way it can be fulfilled.

n the article of T. S. Khachaturov, "The Principal Results he Development of the USSR Transport System," the nges that occurred in all types of transport during the time xistence of the Soviet regime are indicated. The increase of lage took place mainly through the increase of shipments via railroads. From 1913 up to 1955, the freight turnover of the roads increased 14 times, while on all the other types of nsport it increased about four times. In the development of nsport in the USSR, writes the author, of enormous signifi- ce is the utilization of the advantages of the socialist system conomy over the capitalist system. The fact that in the R there is only one transport net allows a complex develop- nt of all types of transport, which is impossible under capi- st conditions. In the article data are given on the increase he mileage of the transport net of the USSR, the creation in country of new types of transport, its technical reconstruc- , etc. The author analyzes the technical economic indices he work of transport. At the end of his article Comrade chaturov characterized the perspectives of the development ll types of transport planned by the 20th Congress of the mmunist Party of the Soviet Union.

he article of L. P. Chertkov, "The Railroad Transport of the R," revealed the significance of railroad transport in so- ist construction and showed the successes achieved in 40 rs. If in 1913 the freight turnover was 65.7 billion ton-kilo- ers, and the turnover of the railroads of the US, 411 ton- meters, in 1955 the turnover of the railroads of the USSR 970.9 billion, and of the US, 909 billion ton-kilometers. m these data one can see that our country has considerably overtaken the US in the total turnover and occupies in that respect the first place in the world.

Along with the development of the socialist economy, considerable changes occurred in the distribution of freight haulage by railroads and in the structure of shipments by railroads. If before the October Socialist Revolution, more than 80% of the total freight turnover was concentrated on the railroads of the Central, Southern, Caucasian and Volga regions, in 1955 the share of these regions declined to 54%, while that of the Ural, Middle Asia, Kazakhstan, Siberia and the Far East regions correspondently increased. The share of the haulage of industrial commodities by the railroad increased from 75.8% in 1913 to 93.6% in 1955 in relation to all shipments. These figures testify the rapid development of the formerly backward outlying parts of Tsarist Russia and the growing industrialization of our country. Along with the freight, passenger transportation increased: in 1913 the railroads transported 84.8 million persons, in 1955 — 1,641 million persons. In the article the problems of technical reconstruction of railroad transport are discussed in detail, and special attention is given to the electrification of the railroads. The technical-economic indices of the work of railroad transport of the USSR are also cited.

The victory of the Great October Socialist Revolution stirred the creative enthusiasm of the toiling masses, a desire to liquidate as rapidly as possible the ruined economy and the technical-economic backwardness of the country. Lenin had seen in the development of all the forces of the nation the basis of inevitable victory of the socialist order. The article of G. N. Yefstafiev is devoted to this creative activity of the masses in the construction of socialism in the USSR and is entitled "The Development of Labor Activity and Creative Initiative of the Masses." Using concrete material, this article reveals the role of the communist "subotniki," the conferences on production, and the campaigns of the shock-brigades in the struggle for solving the tasks of building the economy. From the beginning of 1929, socialist competition of the working people developed over the entire country. It was the decisive force that set the rapid tempo of socialist construction and secured the outstanding successes in the fight for early fulfillment and overfulfillment of the five-year plans.

Comrade Yefstafiev tells about the heroic labor of the workers and peasants during the years of the Great Patriotic War and cites data of the enthusiasm in the new socialist competition and creative activity in the post-war years.

This article is predominantly historical, for the specific materials used in it illuminate the past stages of socialist competition. The author speaks of the advanced experiences and personal material interest as stimulating factors for raising the productivity of labor and the general growth of socialist production, but in a very general way,

The development of Soviet trade is discussed in the article of G. G. Dichtiar and A. G. Kulikov. In this article the problems of transforming private trade into socialist trade are discussed, as well as problems of developing Soviet trade. The authors cite materials that show how, on the basis of the socialist transformation of the country and the rapid growth of social production, private capital, by the end of the First Five-Year Plan, was completely forced out from the turnover of commodities. Under the conditions of socialism, three types of trade exist and successfully develop: that of the state, of the cooperatives and of the collective farms. The victory of socialism created conditions for the successful development of Soviet trade. In 1955 the total volume of retail trade of the state and the cooperatives was 208% of that in 1940, and it was 485% of 1928. The share of state trade in the retail turnover of the organized market in 1955 was 69.2%.

In the article of F. G. Feigin, "The Distribution of Socialist Production in the USSR," the problems of locating the productive forces, connected with the socialist transformation of our country, are discussed. Capitalism left a heritage of extremely uneven and irrational distribution of production in Russia. Without a radical improvement in the geographical distribution of production, stressed the author, the socialist industrialization and socialist reconstruction of agriculture and liquidation of the inequality of the nationalities of the USSR would be practically impossible.

From the very first days of the Soviet regime, V. I. Lenin paid great attention to the proper, scientifically justifiable, rational distribution of the productive forces of the country. In the Lenin plan for electrification, the GOELRO plan, some theses of principles and practice were advanced; proposals about the distribution of industry, about the development of the most important economic regions on the basis of electrification. The Communist Party and the Soviet Government always are concerned about the successful solution of the problem of the complex development of the economy of the economic regions, about the development of industry and agriculture in the regions of Ural, Siberia, Middle Asia and the Far East, with their enormous natural resources. In the post-war period the development of the productive forces of the East continued at an accelerated tempo. In 1955, in the eastern regions about one-third of the entire industrial production originated, including 40% of the electric energy, more than one-half of the steel and rolled-metal, coal and oil. The distribution of machine-building and other branches of industry, and also the distribution of agricultural crops, was improved. If up to the early '30s the principal base of grain production for the market was in the Ukraine, at present a considerable part of the marketable grain comes from Kazakhstan and Siberia. In 1956 the collective farms and the state farms of RSFSR and Kazakhstan delivered to the state more than three billion poods of grain.

The systematically implemented improvement in the distribution of the productive forces over the whole country, accomplished on a scientific basis, played a great role in the utilization of various natural resources, hastening the processes of extended socialist reproduction in the USSR.

The interesting article of G. M. Alapiev on "Development of the Economies of the National Republics of the Soviet Union" is devoted to the realization of the Lenin national policy on the development of the economy in all the republics of the Soviet Union, based on fraternal cooperation of free and equal peoples. In Tsarist Russia most of the national outlying districts had practically no industry at all. It would suffice to say that Turkestan accounted for only 1.75% and Siberia, with its enormous territory, only 2.2%, of the total production of the mining and manufacturing industry of the entire country.

The Great October Socialist Revolution opened the road for the all-sided development of the economy and culture of all nationalities inhabiting the Soviet Union. During the years of the Soviet regime the backwardness of the former outlying districts of Tsarist Russia was liquidated, as is demonstrated by the rapid development of industry, agriculture and culture in all the Union Soviet republics. Large centers of industrial production were created in the Union and autonomous republics of the Caucasus, Middle Asia, Ural, Siberia, Volga region, Kazakhstan and the Far East. In the article numerous data are cited, clearly showing the enormous achievements of the Soviet regime in the development of all branches of the economies of the national regions and republics of the USSR.

In the majestic achievements of the USSR during the 40 years of Soviet power, not an insignificant role belongs to the Soviet system of finance and credit. To this theme the article of V. P. Diachenko is devoted: "The Soviet System of Finances and Credit in the Struggle for the Socialist Reconstruction of the Economy and the Building of Communism."

The Soviet power has realized Lenin's program of the socialist reconstruction of economy, carrying out the nationalization of the banks, the result of which was that the apparatus of accounting and control was used for the service of the planned socialist economy.

In the article of V. P. Diachenko some interesting specific data are cited vividly showing the role of Soviet finances at different stages of the development of the socialist state. The state budget is the principal tool in financially guaranteeing the needs of the industrialization of the socialist country, of the technical re-equipment of socialized agriculture, the training of qualified cadres, and economic and cultural growth in the formerly backward national republics and regions.

The Soviet financial system is developing along with the improvement of the management of the national economy. The extension of the rights of the directors of the enterprises, the leading officials in various departments and also of the rights of the union republics and local Soviets, writes the author, demands further intensification of the fight for the unity of the Soviet system of finances as an important lever in the struggle for the accomplishment of the plans for the national economy.

The main result of the Great October Socialist Revolution, the victory of socialism in our country, is the raising of the stand of living and of the cultural level of the peoples of the USSR. S. P. Partigal writes about this in his article on "Raising the Material Well-Being and Cultural Level of the Soviet People." The development of socialist construction allowed, during the First Five-Year Plan, including in production all the reserves of the labor force in the USSR and liquidating unemployment an misery in the villages. The number of workers and employees in the USSR in 1956 reached the figure of 50.5 million people. In the Soviet Union the eight-hour day is established and strict adhered to. The transition to the seven-hour, and in some industries, even six-hour day, has been started. Real wages are constantly growing: in 1956 they were 82% higher than in 1940. An important factor in raising real wages is lowering the prices o goods of popular consumption and services. From 1947, prices were reduced 2.3 times. In 1956 the money income of the collective farmers, received from the sale to the state of their agricultural products, increased, in comparison with 1955, by 20 billion rubles. For the period 1950-1956, the income of the collective farmers increased by 68%.

The improvement in the material status of the toiling people led to increased consumption by them of all products, compared with the pre-war period. The victory of socialism allowed introducing a most progressive system of insurance, giving security to the working people through pensions, free education and medical service. Housing construction has assumed ever-increasing importance. For the years of the Fourth and Fifth Five-Year Plans alone 250 million square meters of living space in towns and cities was constructed, and about five million houses in the villages. During the years of the Soviet regime the cultural level of the toiling people has been constantly rising.

The article of A. N. Lavristchev, "The Economic Cooperation and Mutual Help of the Countries of the World Socialist System," explains the problems of the origin and development of the world socialist system. The socialist method of production secures a unity in the aims of the countries of the socialist camp and determines the new, unprecedented type of relations between nations. "To the old world, the world of national oppression, national quarrels and national division," wrote V. I. Lenin, "the working people contrapose a new world where the working people of all the nations are united where there is no room for privileges, nor for the slightest oppression of one man by another man."

In the article of A. Lavristchev the forms and methods of economic interrelations between socialist countries are cited. Problems of developing trade and mutual help in solving economic tasks are discussed. Such relations permit these countries to develop and improve socialist production with the lowest expenditure of forces, means and time.

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One has to point out some defects of the collection. In some articles the same theses are repeated. Some of them are declarative in form without the support of convincing material. Thus, for instance, in several articles the problems connected with the transformation of the management of industry and construction under the economic-administrative regions, are presented in a very general way and do not sufficiently reveal the essence of this extremely important measure. But these defects cannot affect the total evaluation of the work. There are also a few factual inaccuracies in the collection.

As a whole, this collective work of Soviet economists is a valuable contribution. It gives a clear idea of the enormous progress of Soviet economics over 40 years. Thanks to the leadership of the Communist Party, based on a profound knowledge of the laws of social development, the heroic Soviet people, utilizing the great advantages which the socialist system of economy possesses over capitalism, have built a socialist economy and now are triumphantly proceeding from socialism to communism.

The sum total of the very valuable materials in the collection under review offers a majestic picture of the triumph of the vital power of the ideas of Marxism-Leninism, the Lenin plan of communist construction. The analysis of certain problems of Soviet economics, the laws of the origin and development of the socialist system of economy, the various problems of production distribution, circulation and consumption under the conditions of socialism are of interest for economic theory, for the political economy of socialism. This book received the prize of the USSR Academy of Sciences in 1957.

A. Bakumenko, I. Kachalov.

Belkin

e Application of Electronic Computers Economic Planning and Statistics

e development of electronic computers is one of the great-
chievements of contemporary science and technology. They
interpret and process tremendous amounts of numerical
rial at speeds of several thousands per second. Following
en sequence, these machines can change the program of
utation and perform not only arithmetical, but also logical
ations. Having performed the given operations, the ma-
s automatically print the results.

present the manufacture of electronic computers has be-
a big business in the leading capitalist countries. In the
d States, for instance, about 100 firms are occupied in
ning and manufacturing such machines.

important area of use of electronic computers is econom-
lcuiations. In the banks and business offices of the US to-
more than four thousand such machines are employed.

e electronic computers are widely used also for economic
stigations covering the whole country. In the United States,
and, France, the Netherlands, Denmark, Norway and other
tries, data for the so-called "tables of inter-branch sta-
s" are computed with the aid of electronic machines. These
s find a growing use in the study of business fluctuations
re in great demand by military and monopolistic groups.
US, plans for the mobilization of industry are worked out
e basis of these tables. They are used also for determining
ost profitable investments and for forecasting employment
nd, etc.

the USSR fast operating electronic computers "BESM,"
la," (machines of large size), "M-2," "M-3," and "Ural"
maller size) are working. One has to admit, however, that
ronic computers still are not produced in the USSR in ade-
numbers yet. As our industry possesses a high technical
and necessary capacities, it can in a short time organize
-production of electronic machines. A serious defect is
e do not manufacture any specialized electronic machines
conomic calculations, and, until recently, universal com-
s were not used for this purpose.

der a planned socialist economy the use of electronic ma-
s for economic calculations must give incomparably great-
sults than in capitalist economies. In contrast to the cap-
t countries, the field of utilization of electronic machines
USSR should be not only statistics, but mainly economic
ing.

st year, research was carried on concerning the use of
ronic computers for economic caluculations, particularly
alculating tables of inter-branch relationships. This re-
h was performed in the USSR Academy of Sciences' Labo-
y on Management Machines and Systems.

e use of electronic machines for preparing economic in-
allows us to establish and examine the mutual relations
nterdependence among branches of the economy more
y and fully than can be achieved by ordinary means, as is
now. For instance, in preparing the tables of the balance
social product in the achievement and planning balances
national economy, and also in preparation of balances of
rincipal products.

h electronic machines it becomes possible to use such
ods of processing of statistical data, which permit calcu-
of valuable indices for profound analyses of inter-branch
ions, as well as for preparation of the current and perspec-
lans of economic development. These indices, called "co-
ents of total expenditures" characterize the multi-sided
ions and interdependence among branches that are formed
g production of the social product.

is known, total expenditures of raw materials, fuel and
includes direct and indirect expenditures. For instance, the total expenditure of power for manufacturing an airplane includes not only power used directly by the aircraft factory, but also power used for smelting aluminum used for manufacturing the plane, used by the electric locomotive that delivered the materials and the fuel to the aircraft factory, power used in the mine for the extraction of this fuel, etc. Cotton is not used directly in the manufacture of the airplane, but it is used in the upholstery of the interior of the cabin. Thus, in the total expenditures for manufacturing an airplane the cost of cotton also should be included.

Until recently the statistical and planning practice did not generally account for the total expenditures of materials. The material balances, even the most detailed ones, included only direct expenditures while indirect expenditures were estimated only approximately.

The initial material for calculation of total expenditures (that is, direct and indirect) with the help of electronic computers is a so-called "chess-board-balance." An abridged diagram of a chess-board-balance is on the following page.

The lines show the destinations of products by branches and their quantities shipped by industry, agriculture, etc. The columns show the quantities and products used in industry, agriculture, etc., in their production. Besides branches of production, branches of the non-production and foreign trade sphere are also considered (import, as a source of supply; export, as the user). Population data in the rows represent payments or expenditures of labor by branches, and population data in the column represent the personal consumption of the products of corresponding branches.

It should be emphasized that for the purposes of economic analysis and planning the diagram of the chess-board-balance must show much more detail. Industry should be represented by tens and even hundreds of branches. Agriculture, too, should be subdivided into tens of branches. Transport can be subdivided by types, etc. Thus, instead of one row and one column for "industry" there should be shown various products of industry — coal, oil, gas, oil-shales, other fuels (in thermal units), thermal power, hydro-electric power, iron ore, pig iron, steel, rolled steel, cement, lumber, ferro-concrete structural sections, metallurgical equipment (by types and power), chemical equipment, metal-cutting lathes (by types), trucks (by tonnage), passenger automobiles (by trade marks), etc.

For the purpose of obtaining a table of total expenditures it is immaterial in what units of calculation the indices of the chess-board-balance are shown. The indices of the chess-board-balance can be value indices or physical unit indices; or for some products indices may represent values; for others, physical units. It is important only that each product be presented in the same units of calculation. Thus, for example, it is not proper to show a part of ferro-concrete in cubic meters, and another part in tons; a part of textile fabrics in meters, and another — in kilograms, etc.

Even if the indices of the chess-board-balance are given in value form, they characterize material relationships independently of prices used. It is required only that the price for the same product be the same. In such a case, to convert the value-index into a physical unit index the sum-total of expenditures on a given product must be divided by the price per unit of this product. The result will be the expenditure of this product expressed in physical units.

The possibility of operating with physical unit indices as well as value indices and the independence of the final results from the prices used is very important, especially if one considers that for some goods we have no uniform prices, while the prices of some other products are not always prices determined by economic considerations.

In such a balance there is a formal similarity between the branches where the public product is created, but there is a difference in principle between these and remaining branches of the balance.

Between the branches of production, under the given level of technique, a more or less rigid technological relationship exists. Thus, if in subdividing agriculture by the rows of the chess-board-

DISTRIBUTION BY BRANCHES / SOURCES OF SUPPLY	Branches of production					Non-production branches	Accumulation	Export	Population	Total
	Industry	Agriculture	Transport	Construction	Trade					
BRANCHES OF PRODUCTION										
INDUSTRY										
AGRICULTURE										
TRANSPORT										
CONSTRUCTION										
TRADE										
BRANCHES OF NON-PRODUCTION SPHERE										
ACCUMULATION										
IMPORT										
POPULATION										
TOTAL . . .										

balance, we show sugar-beets, and subdividing industry by columns, we show sugar, then the expenditures on sugar-beets for the production of sugar will be determined by the amount of sugar produced and the amount of sugar-beets needed for production of a unit of sugar.

This amount depends upon the sugar content of the beets, the conditions of storing, the time for processing, the quality of equipment in the sugar works — i.e., on the whole technological process of sugar production.

However, technological relations between the branches outside of the sphere of production, naturally, do not exist. The ratio of imports to exports may be different. The relation between consumption and accumulation is determined not by technological, but by economic factors.

As the columns of the chess-board-balance show expenditures of various types of national product used in production of products enumerated in the headings of the columns, dividing the column indices (in the part of consumption for purposes of production) by the total volume of production of the corresponding product we may find expenditures per unit of this product. As a result we shall obtain a table of coefficients of direct expenditures for the products enumerated in the rows, per unit of product enumerated at the head of each column. If we designate the coefficients by the letter "a" with two subscripts — one indicating the number of the row in which this coefficient is found, and another indicating the number of the column, then the table of direct expenditures will acquire the form on the following page. (A)

For instance, in this table a_{12} shows the expenditures of industrial production per unit of agricultural production; a_{31} — the expenditures of transport per unit of production of industry, etc.

Those are the direct expenditures for the product. The problem is in finding the total expenditures. For instance, to find the total expenditures of industrial production in the production of agriculture, one has to add to the direct expenditures of industrial production the indirect expenditures; these were made through industrial production, production of agriculture, transport, etc. And in the production of these branches the productio of industry was spent not only directly, but also indirectly. The above can be expressed by the diagram on the following page. (

From this diagram the total expenditures of the production of industry per unit of production of agriculture can be expressed by the following equation:

$$B_{12} = a_{12} + B_{11}a_{12} + B_{12}a_{22} + B_{13}a_{32} + B_{14}a_{42} + B_{15}a_{52}.$$

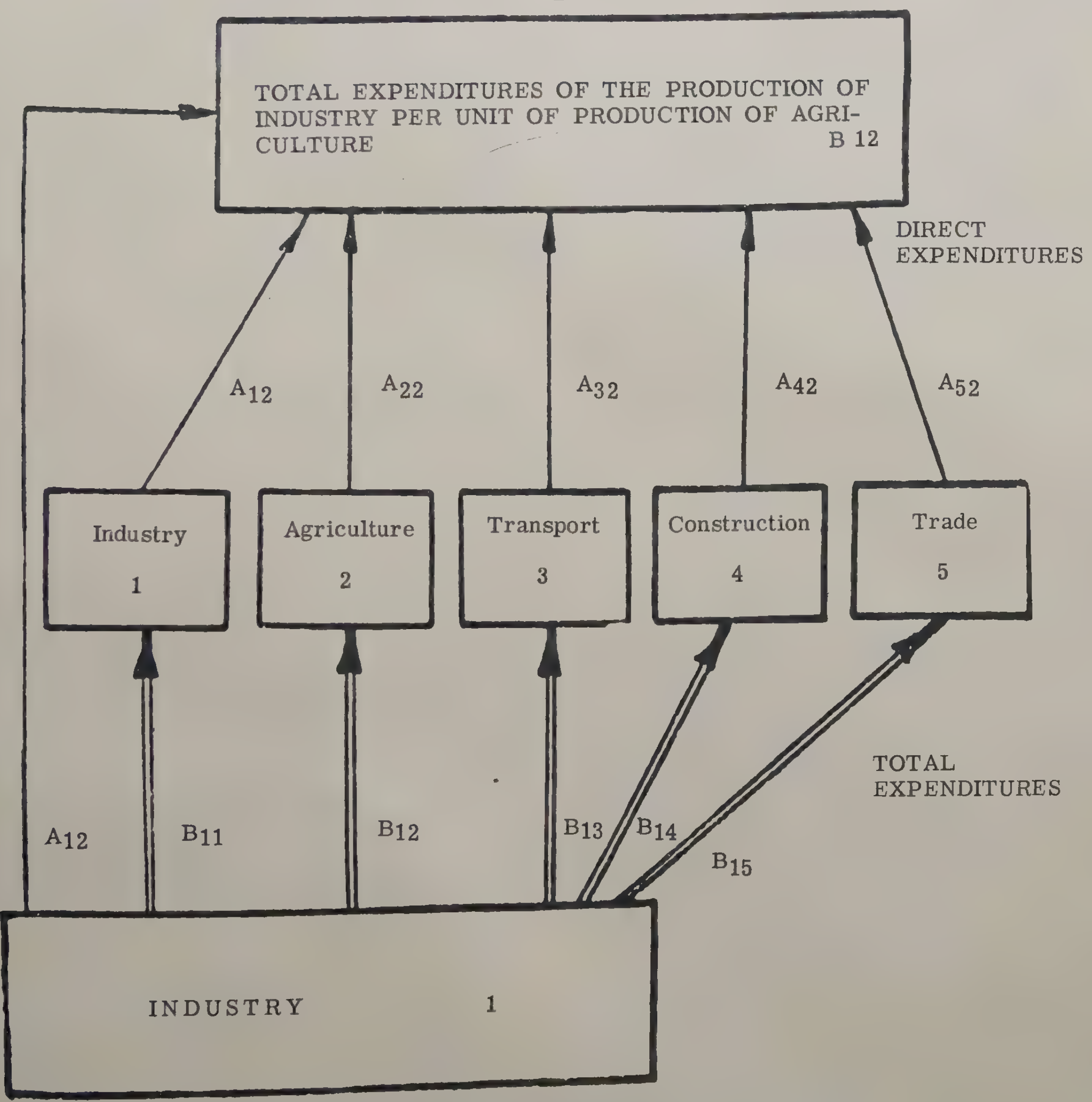
In this equation the symbol B expresses the total expenditure of products, marked by the first subscript, per unit of product marked by the second subscript, i.e., the total expenditures of the products of industry for the products of agriculture are represented by B_{12}; for the products of industry, B_{11}; for the products of transport, B_{13}; for the products of construction, B_{14}; and for trade, B_{15}.

As the diagram and equations show, the total expenditures of industrial products per unit of product of agriculture are composed of direct expenditures of industry per unit of product of agriculture plus the total expenditures of industry per unit of every product which is used per unit of product of agriculture. So, the products of industry are spent on the production of agriculture as follows: first, directly (for instance, salt for the animals); second, through other products of industry (chemical products, used to combat pests injuring agricultural crops); third, through other products of agriculture (mineral fertilizer for raising fodder crops); fourth, through transport (fuel for the locomotive that has delivered machines for gathering the harvest), etc. And of all the products directly used in agricultural production, industrial products are spent not only directly, but also indirectly. In particular: aside from the fuel used by the locomotive, total expenditures include fuel for the locomotives used on haulage for the railroad's needs, as far as they were connected with servicing the locomotive which delivered the goods for agriculture.

A

STRUCTURE OF PENDITURES PER UNIT PRODUCTION \ NAME OF THE PRODUCT BY BRANCHES		Industry 1	Agriculture 2	Transport 3	Construction 4	Trade 5
USTRY	1	a_{11}	a_{12}	a_{13}	a_{14}	a_{15}
RICULTURE	2	a_{21}	a_{22}	a_{23}	a_{24}	a_{25}
ANSPORT	3	a_{31}	a_{32}	a_{33}	a_{34}	a_{35}
NSTRUCTION	4	a_{41}	a_{12}	a_{43}	a_{44}	a_{45}
ADE	5	a_{51}	a_{52}	a_{53}	a_{54}	a_{55}

B



C

		INDUSTRY 1	AGRICULTURE 2	TRANSPORT 3	CONSTRUCTION 4	TRADE 5
USTRY	1	B_{11}	B_{12}	B_{13}	B_{14}	B_{15}
RICULTURE	2	B_{21}	B_{22}	B_{23}	B_{24}	B_{25}
ANSPORT	3	B_{31}	B_{32}	B_{33}	B_{34}	B_{35}
ISTRUCTION	4	B_{41}	B_{12}	B_{43}	B_{14}	B_{45}
ADE	5	B_{51}	B_{52}	B_{53}	B_{54}	B_{55}

Thus, in the above equation there are five unknowns espressing the total expenditures of products of industry per unit of product of other branches: B_{11} ; B_{12} ; B_{13} ; B_{14} ; B_{15} . For each of these unknowns we can write an equation. Thus, there would be a system in which there will be as many equations as there are unknowns. By solving these equations we can determine the total expenditures of a given product for the production of all other products. Consequently, by solving such systems of equations we can determine the expenditures of all other products for manufacturing the given product. As a result, we would have the table of total expenditures on the preceding page. (C)

When reading this table by the columns, we can see the total expenditures of products enumerated in the rows, per unit of the product named in the column.

The total expenditures are marked in this table by the coefficients "B." The first column of the table shows the total, i.e., the direct and indirect, expenditures of production of each branch for manufacturing a unit of production of industry; the second column shows the same in relation to the production of agriculture, etc.

As the production of every product in the economy is in one way or another connected with the production of all other products, the calculation of each index takes into account all other indices of the table of direct expenditures, with no exception. Therefore, if in the table of direct expenditures there are indices of 100 branches, and consequently the dimensions of the table are 100 by 100, for each index of the table of total expenditures, it will be necessary to perform simultaneous calculating operations with two to three thousand numbers (the percentage of filled squares in the table of direct expenditures is approximately 20-30; in the table of total expenditures, as a rule, all the squares are filled). To fill in squares of the entire table, several million calculations are required. It is quite obvious that such calculations can be performed only with the help of electronic computers.

The great possibilities of using the tables of total expenditures are based on the following: each column of the table is computed as a complex of total expenditures of various products per unit of the product named at the head of a given column.

Each element of the chess-board-balance is related in two directions. It corresponds with the elements standing in the same column and in the same row with it. In contrast to the elements of the chess-board-balance, the elements of the table of total expenditures are interdependent only in one direction — by the columns, while the columns are independent of each other.

The chess-board-balance in its original form can serve in planning for the preservation of proportionality only if the tempo of growth of production of all the products is the same and the relations between production, consumption and accumulation are not changed. This is easy to understand. If, for instance, it is required to increase the output of automobiles by 20%, then, using the table of direct expenditures, one can calculate the direct expenditures that would be involved per car — expenditures of metal, rubber, glass, etc. This would necessitate the growth of expenditures for each of these products — ore and coal for metal, latex for rubber, sand and fuel for glass. This, in turn, will increase the expenditures of lumber for props in the mines, of alcohol for rubber, etc. Thus, all the indices of the chess-board-balance would have to be recalculated. If this is done empirically, there is no guarantee that expenditures of some product would not be omitted. Only by increasing all the elements of the chess-board-balance in strict proportion could one be protected from such a miscalculation.

By using the table of total expenditures one can take into account in the plan different tempos of the growth of production of various products. In this case only the indices of total expenditures on the given product will change and appear in the same column (in our case in the column "automobiles"); these indices include direct and indirect expenditures, i.e., all the types of production taking part in the manufacturing of this product.

With the help of the table of total expenditures, despite an unequal tempo of growth of various products, the planning organs can guarantee the necessary cooperation of different branches of production. This is so because in the table of total expenditures the technological interrelations that exist in the production of different products are fixed. The economic relations — i.e., the relation between consumption and accumulation, and between exports and imports — remain outside the table of total expenditures. This allows planners to change the proportio of the national economy by changing economic relations withou changing technological relations. This, certainly, not only does not exclude, but even assumes simultaneous calculating of the optimum economic connections and relations.

The specific methods of using the tables of total expenditure for economic calculations in preparation of the plan are exami below.

Suppose that in the directives for preparing a plan it is proposed to produce a certain amount of diesel locomotives, tractors, combines, machine tools, sugar, etc. The expenditures o the production of a unit of the given product, indicated in the proper column of the table of total expenditures, should be multiplied by the number of the units planned. As a result, we get a table, in which the totals in the rows will indicate the amounts of different products that should be manufactured in order to secure, with the existing technology, the planned output of products to be issued for consumption and accumulation. Exactly these indices — consumption and accumulation — have to be determinants in socialist planning. In conformity with the aim of socialist production — to assure satisfaction of the needs of society — the point of departure in planning must be the aggregate of the final products, out of which are formed the fund for consumption and the fund for accumulation. It is not enough to produce much steel, cement, wood or cotton. The aim is to produce an adequate amount of machines, buildings, furniture, textiles, fabrics, etc. Hence, the importance of the tables of total expenditures for perspective planning.

No less effective are the tables of total expenditures for current planning and actual management of the economy. Thus, for instance, knowing the total expenditures for one or another product, one can, when planning the production and distribution of th product, estimate fully the need for it in the national economy, and make provisions in case of a shortage for an increase of output of this product, or for its replacement by one that is less scarce.

The tables of total expenditures also can serve as a guide wh working out initial goals in preparation of a plan. For instance, if the planned goal for the output of the final product demands a level of production of certain products, which is impossible to achieve during the period planned, this goal should be correcte The adjusted goal can be checked again by the described metho of calculation with the help of the tables of total expenditures a then additional corrections can be made. Thanks to its simplici such a checkup could be made several times and in very short order. As a result, we would have a practical plan, a feasible plan, and yet not a leisurely one.

Further, from the tables of the relations among the branches we can determine to which branches and in what amounts variou types of production should be delivered in order to fulfill the ta of the plan of manufacturing the final products. For that purpos the calculated volume of production of each product (adding the planned output of the final products) should be multiplied by the index of direct expenditures required for its manufacturing. W then would have the chess-board-balance, expressing the structure of the national economy by the end of the planned period.

Knowing the level of production of various articles needed in order to secure the planned output of products designed for consumption and for accumulation, one can make a number of othe calculations important for the plan. For instance, having ascertained the reserves for additional production of the product wit the existing capacity, it is possible to determine the need in additional capacity for attaining the planned level of production. can also calculate labor force requirements (in numbers and b professions). For that purpose one has to multiply the calculat volume of production of various products at the end of the year by the standards of direct expenditures of labor.

In the calculation of the tables of total expenditures and the indices determined with their help it is possible to take into account the trends of technical progress. For that purpose, first the coefficients of direct expenditures should be adjusted. For instance, if during the period of the plan, thanks to the perfection of technique, it is hoped to lower metal requirements per automobile from 1.8 to 1.5 ton, then in the table of direct exditures the corresponding coefficient of expenditures should changed. Then the table of total expenditures should be calated on the basis of the new coefficient in the table of direct enditures.

he tables of total expenditures, calculated for the union relics and for the economic regions, give a clear idea about basic relations among the regions. On the basis of these es one may obtain the most rational cooperation between the ious regions of the country and work out a diagram for the mum flow of freight. As one of the first steps in this direc- it is planned to construct tables of relations among the ecoic-administrative regions of Siberia.

he more detailed the presentation of total expenditures by nches in the tables, the wider the possibility and the greater effectiveness of their use in economic analysis and in plan- the national economy.

mong the problems of calculating total expenditures are ulating the amount of labor required for production of vari- products, as well as calculating their cost of production, ded for the formulation of an economically justified price em.

he calculation of the cost of production of various articles d be illustrated by the following simplified example. Sup- that for the production of one ton of pig-iron 0.1 ton of iron, 1.5 ton of ore, 0.7 ton of coke, 100 kw. hours of power 150 rubles on wages are used. Then the cost of producing iron (ignoring for simplification the amortization of basic s), could be presented by the following equation:

$$X_1 = 0.1X_1 + 1.5X_2 + 0.7X_3 + 100X_4 + 150$$

this equation the cost of production of one ton of pig-iron $_1$; one ton of ore — X_2; one ton of coke — X_3; one kilowatt ower — X_4.

he costs of ore, coke and power are not known. But they too be represented by such equations. By similar equations the s of production of the products, which in their turn, are used he production of ore, coke and electric energy would be esented. Each of the equations is the calculation of the ave cost of production for the given branch, received from the wing formula of calculation:

tems of penditures	Unit of measurement	Amount	Price*	The sum
1	2	3	4	5

the end, the cost of production of each article of labor used he needs of production will be represented by an equation. e will be a system of equations, in number equal to the ber of the unknown quantities, i.e. as many as there are ucts the cost of production of which is sought. Having found, e result of solving this system of equations, the costs of uction of all the objects of labor, it is easy to calculate the of production of any article on the production of which this r was spent.

eoretically the solution of such a system of equations does resent any difficulties, but in any given case there are sev- thousands of equations. This requires dozens and even reds of millions of interconnected calculating operations, t is impossible to cope with them by regular methods. With elp of electronic computers such calculations can be pered in a short time.

e indices received as the result of the solution of the equa- are not the cost of production in the regular meaning of category because material expenditures entered into the lation of the cost of production according to their prime i.e. without surplus product. Still, these indices of pro- on costs could be used for determining prices. As a mat- f fact, in order to pass from the given system of equations e costs of production to a system of equations expressing otal social expenditures of production, it is enough to add e right part of every equation a certain amount of the sur- product and once more solve the new system of equations.

Certainly, the amount of the surplus product, which is contained in the price of each separate product, and consequently, specific prices, are determined by consideration of a number of economic and political factors. But, when planning prices, for the purpose of their coordination and for their conformity with actual social expenditures such calculations may serve as a guide. Following a similar scheme, with the help of electronic computers it is possible in the shortest time to accomplish the work of calculating the relations resulting from mutual influences of changing prices on each other, calculations which require extremely large amounts of work.

By the same method which is used for calculating indices of production costs total expenditures of labor for manufacturing certain products are determined. For instance, to express the total expenditure of labor for producing one ton of pig-iron the same equation for determining of the cost of production of one ton of pig-iron is used, with one difference only, that in the right part of the equation another index appears — not the 150 rubles of wages, but, let us say, 30 man-hours of direct expenditure of labor for the production of pig-iron.

In economic analysis and statistics the calculation of total expenditures allows comparison of the proportions of use of various materials and labor for the production of different products in the USSR and abroad, as well as in every country for a number of years, without distorting such comparisons by structural distinctions and organizational changes in their production.

The direct expenditures of various materials on the production of certain products depend on the form in which they were delivered to the enterprises manufacturing them and the stages of processing they passed before. The comparison of direct expenditures in cases when there was some additional spending of materials in the preceding stages of processing can give a distorted picture. When comparing total expenditures, the additional outlay, naturally, will be accounted.

Especially badly distorted by structural changes can be the dynamics of the amounts of labor required by production. For instance, the increased role played in metallurgical production by combinates, uniting several plants and processes, results when all other conditions are equal in an increase of the direct expenditures of labor per ton of smelted metal, for coke is produced by combinates themselves while the plants receive it from outside and so have no direct expenditures for coke production. Such changes in the structure of metallurgical production do not affect the dynamics of total labor expenditures.

The dynamic series of total expenditures of labor and materials for various products are economically more meaningful than the series of direct expenditures. They give a better idea as to the changes in the proportions of expenditures of labor and materials for the output of given products.

The comparison of the total expenditures of labor and materials for different variants of capital investments at the designing stage could render considerable help in selecting the most effective combination of production factors.

Calculation of total expenditures was performed in 1957 in the Management Machines and Systems Laboratory on the fast operating electronic machine "M-2." There was prepared a program of calculations, i.e. consecutive operations of the machine. This program, together with the initial data on direct expenditures, was "given" to the machine; the machine then calculated and printed the coefficient of total expenditures.

In this way were calculated, in particular, the tables of total expenditures in 17 by 17 (i.e. 17 branches of the subject and 17 of the predicate) in physical unit indices, and 44 by 44 in price indices. For the table 17 by 17 0.3 million calculations were performed. The table 44 by 44 required 2.5 million calculations. The machine "M-2" is a universal computing machine, designed for solving problems which require a great number of calculating operations with a comparatively limited volume of given and required data. Therefore in solving the said operations the speed of its work was considerably lower than usual (2,000 operations per second). But even so, the time spent on calculating and printing the table of total expenditures 17 by 17 was one hour, and for the table 44 by 44, one shift. The electronic computers that are not universal, but especially designed for economic calculations, would perform this work more quickly.

The importance of calculations performed in this manner is

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his column are shown, of course, the prevailing prices for iven calculations. Their level is irrelevant.

mainly that they allow mastery of the methodology of preparing tables of total expenditures with the help of electronic machines and working out of methods of using these tables for planning the national economy. Especially important in this connection is calculating of total expenditures in physical unit indices.

Certainly the tables 17 by 17 and 44 by 44 are inadequate for practical use in planning. For this purpose much wider tables are needed, say 500 by 500 or even 1,000 by 1,000. A sufficiently detailed chess-board-balance, necessary for such calculation, can be constructed on the basis of standards of material expenditures, the average costs of branch cost accounting, balances and plans of distribution of basic products, the tables of the balance of the social product prepared as a part of the achievement balance of the national economy, and other materials. Some of the data will have to be collected and processed specially for this purpose.

One has to remark that the tables of the chess-board-balance were prepared and widely used in statistics and planning of the national economy of the USSR in 1920-1930. Recently, the question of working out the chess-board-balance was raised repeatedly, particularly at the All-Union Conference of Statisticians in June 1957.

Aside from the tables of total expenditures electronic computers can perform a great number of other calculations. The speedy performance of calculations by such computers is especially valuable for urgent statistical work and for current planning. It allows, in a very short time, processing of statistical materials, calculation and comparison of a great number of possible designs in order to select the optimum variant for the plan of the national economy, etc. The use of electronic computers for planning and for statistics of the national economy has very broad perspectives.

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The Economics of Auxiliary Enterprises

The state agricultural enterprises of the country are represented at present by state farms and auxiliary enterprises.

In the collected articles on statistics, "The National Economy of the USSR," and "The National Economy of the USSR in 1956," published in 1956-1957, all the state enterprises are divided into two groups: the state farms and the auxiliary enterprises. This grouping was introduced by the Central Statistical Administration in accordance with the departmental index, and therefore is not quite consistent. Thus, in the group of state farms are included all the enterprises of the four former ministries of agreiculture and food irrespective of their size, i.e. it includes some very small enterprises. In the group of "other enterprises" were included all those belonging to other ministries, departments, economic councils and institutions. Among them there are some very large-scale enterprises (hog-breeding state farms and the hot-house and hot-bed combines of the Ministry of Trade of the USSR, the state farms of several former ministries of industry, etc.). Under this grouping such important economic indices as the volume of production and the character of the enterprise are not taken into consideration. Still, the indices cited in these books allow us to get certain ideas about the basic indices of each of the two groups of state agricultural enterprises. This can be seen in the table below.

	1940		1955		1956	
	state farms	other enterprises	state farms	other enterprises	state farms	other enter- prises
Number of enterprises	4,159	45,836	5,134	120,019	5,099	116,33
Sown area in thousands of hectares	11,559	1,700	25,846	3,525	31,515	3,77
Cows (in thousands)	952	249	1,347	325	1,465	34
Hogs (in thousands)	1,910	990	5,091	1,476	6,241	1,90
Tractors, 15-hp. (in thousands)	100	18	257	71	316	78
Combines for harvesting grain (in thousands)	27	1	63	11	83	11
Year average of workers (in thousands)	1,373	387	2,054	778	2,169	78

This table indicates that over the past 16 years the number of the state farms increased 23% and the "other enterprises" more than 2.5 times. The number of the latter today is more than 23 times the number of state farms in the USSR. During the same period the state farms have extended their volume of production 1.5-3 times, and the number of their workers increased 50%. At the same time the "other enterprises" increased their number of workers two times and their sowing area 107%, increased their number of cows 30% and number of hogs 66%. Thus, as we see, in the state farms there occurred a considerable growth of productivity of labor. In the other enterprises, on the contrary, a decline in the level of productivity of labor was observed. Thi can also be seen from the data on the proportion of the state far to the other enterprises in the state agricultural sector of the country (in %).

	1940		1956	
	state farms	other enterprises	state farms	other enterprises
The number of enterprises	8.3	91.7	4.2	95.8
Sown area	87.0	13.0	89.0	11.0
Number of cows	79.5	20.5	81.0	19.0
Number of hogs	66.0	34.0	76.5	23.5
Number of tractors (in 15-hp.)	85.0	15.0	80.0	20.0
Number of grain combines	96.0	4.0	88.0	12.0
Yearly average of workers	78.0	22.0	73.5	26.5

From this table one can see that the share of "other enterprises" in the volume of production is falling, while their number, technique and number of workers occupied there are growing.

The share of all other enterprises (including the collective farms) in the total agriculture of the country varies from 1 to 6% (by the basic indices of area sown, number of workers, number of cows and hogs). The proportion of the auxiliary enterprises in production for marketing in the socialist sector of agriculture in 1956 was: for potatoes — about 3.5%, for milk — 2% and for meat — 1.6%.

That the economic effectiveness of the "other enterprises" is considerably lower than that of the state farms and the collective farms, can be seen from the data of the average size of these groups.

	collective farms	State Enterprises	
		state farms	other enterprises
Sown area (in hectares)	1,800	6,200	32.5
number of cows	135	287	2.9
number of hogs	306	1,224	16.4
number of workers	—	427	6.7

As can be seen from the figures on the preceding page, the wn area of all the “other enterprises” is 190 times less than the state farms and 56 times less than in the collective farms an average), the number of cows correspondingly 99 and 47 nes, that of hogs 77 and 19 times, less. The average size of “other enterprises” is not very different from that of the ddle peasants during the period before collectivization. But n such an economy was served by one family, while now as average, some 6.4 workers are occupied on them.

During recent years a great deal was accomplished towards enlargement of the state farms, and as the result of this ir size was increased 1.5-2 times. Also considerably en- ged were the collective farms, and their average size was reased several fold. But all these measures, designed to engthen and further develop the economics of the socialist erprises, did not affect the “other enterprises.” More than t, their average size by all the indices (except the number of ctors and combines) continued to decline. But the increase numbers of tractors and combines with the scanty sown areas such enterprises is not a positive phenomenon. In such an erprise one tractor (conditionally 15 horse-power) is used 48 hectares of sowing, i.e. two times less than in the state ms and 2.5 times less than in the machine tractor stations, ich testifies to a very low level in the use of technique in h enterprises. The average load of sowing of all cultures one worker in 1956 was: in the state farms —14.6 hectares l in the “other enterprises” 4.8 hectares; of cows corre- ondingly 0.68 and 0.4, of hogs — 2.9 and 2.4 heads. Conse- ntly, in spite of the high degree of electrical equipment in “other enterprises” labor is used there less efficiently n in the state farms.

The sample investigations effected during recent years in a nber of “other enterprises” situated near Leningrad, Chelya- sk, Archangel, Izhevsk, Velikiye Luki, Cherepovets, Novgo- , Nizhne-Tagil, Magnitogorsk, and Grozny confirm these con- sions. (These investigations also revealed the existence of the called “wild” auxiliary enterprises, which were not regis- ed in the agricultural sections and were not accounted for local statistical organs.) The initial materials of these in- tigations were processed by us by the method of grouping size of land-area. The auxiliary enterprises were divided three groups: large — with an area of over 1,000 hectares; ddle-size — from 100 to 999 hectares; and small — up to 99 tares. As a result, the following data were received:

	Units of measurement	Auxiliary enterprises			
		large-size	middle size	small	total
mber of farms	%	3.0	13.0	84.0	100
nd area	%	48.5	35.5	16.0	100
ea sown	%	37.5	38.5	24.0	100
ea including hat with vegetables	%	47.5	30.5	22.0	100
mber of cows	%	35.0	28.0	37.9	100
erage per farm:					
der all crops	hec.	570.0	129.0	12.7	41.5
ncluding vegetables	"	116.0	16.5	1.9	7.2
ws	no.	118.0	22.0	4.4	10.0
gs	no.	225.0	142.0	64.0	79.0
terprises without live-stock	%	—	30.0	65.0	53.0
ncluding those without cows		—	55.0	77.0	71.0
erage yearly marketable production of:					
vegetables	ton	360.0	209.0	9.0	51.0
potatoes	"	180.0	76.0	11.5	27.0
milk	"	210.0	35.0	5.0	17.3
vered by nvestigation	%	100.0	60.0	9.0	—

Thus, 84% of the auxiliary agricultural enterprises which were investigated were small-size units. Especially numerous are such enterprises in the neighborhood of Archangel, Izhevsk, Chelyabinsk, Nizhne-Tagil, and Leningrad. At the same time the size of a number of the auxiliary economies of the industrial enterprises of Izhevsk and Leningrad do not yield to the middle-size state farms. The large-scale auxiliary economies are producing relatively large amounts and therefore their existence is justified economically. In contrast the middle- and small-size units are not playing any substantial role in supplying the population of large cities and industrial centers with the food-stuffs, and play a still smaller role in the economics of agriculture as a whole.

The volume of productin in the middle- and small-size auxiliary enterprises is decreasing from year to year. Many of them are terminating vegetable-growing under cool-house conditions, as well as livestock breeding (Archangel, Izhevsk, Leningrad); in a number of them livestock breeding is not developed — for one average auxiliary farm there are 2.1 cows (Archangel) and even 0.35 cows (Izhevsk); their economy is developing one-sidedly, and their specialization quite often does not correspond to the requirements of the specialization of agriculture in the suburban zone; finally, their technique is badly used. There are some auxiliary enterprises that have tractors but practically no land.

The material and technical equipment of such enterprises also is not adequate. The problems of planning are solved in each of them in their own way. This affects the economy negatively and sometimes results in creating “special cases.” Thus, in some auxiliary enterprises of the Ministry of Trade in Archangel it was planned to spend 900 man-days for the cultivation of one hectare of cabbage. The wages for workers, specialists and administrative-technological personnel of the auxiliary enterprises belonging to different ministries, state farms, etc., differ greatly, and this leads to fluctuations in quantities of labor input.

Their scattering, and the small volume of production on the auxiliary enterprises lead to the irrational use of the labor-force and low productivity of labor. Furthermore, in the majority of middle- and small-size enterprises there is not even any elementary bookkeeping. It is no wonder that these enterprises show enormous losses. For instance, a group of auxiliary enterprises in the timber industry of Archangel, having 149 hectares of sown area and 156 cows, showed a loss of 2 million rubles in a year.

The state agricultural enterprises, being enterprises of a consistently socialist type, are designed to be leaders in agriculture; to supply the country in ever growing amounts with its products; and to spend for them ever decreasing amounts of labor and materials. The state farms of the Ministry of Agriculture of the USSR are generally solving these problems satisfactorily, are expanding production from year to year and are improving their economic indices. About the auxiliary enterprises, to our regret, we cannot say the same.

In the past the organization of auxiliary enterprises was a positive factor that played a certain role in the economics and in the food-balance of the country by supplying the cities with food-stuffs. But at present the existence of tens of thousands of small and midget agricultural enterprises with low productivity and commodity output, causes the state losses of hundreds of millions of rubles each year and diverts labor from more productive use, i.e. keeps labor in enterprises which are not capable of achieving extended reproduction, and, in our opinion, are not always economically justifiable. That is why it seems to us that it would be expedient to concentrate on adding to the number of state agricultural enterprises in the system of the Ministry of Agriculture of the USSR. This would allow us to liquidate unnecessary lack of coordination in their management, in their material-technical equipment, planning, bookkeeping, accounting, payments for labor, realization of prices, etc. As a rule, it is desirable to consider well the problem of enlarging the middle- and small-size auxiliary enterprises, and of transforming them into state farms. There are several methods for doing so. First, by merging a group of adjoining small enterprises into one large enterprise; second, by incorporation into a state farm all the nearby auxiliary enterprises. As for those

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N. Kokosov

Economic Councils of the Ural and the Development of Local Economic Research

The organization of the local economic councils resulted in improved conditions for on-the-spot economic investigations. Before that time the section of economic investigations of the Ural branch of the USSR Academy of Sciences had to deal with a number of ministries and departments which were in Moscow. Those working in them very often had only abstract ideas about local conditions and the needs of the Ural economy. But soon after the local economic councils were organized we were able to formulate more specifically the subjects of investigations, and were able to start rapidly operations to realize the proposals advanced concerning scientific work. For instance, for a number of years we studied the economic possibilities of expanding the basis of ore deposits in the Ural. When the Sverdlov Economic Council, in the early days of its functioning, learned of the deficiency of ores in the ferrous metal industry, it worked out a number of proposals for the development of the local base of raw materials. One has to admit that proposals such as the utilization of the complex ores of the Volkovsk deposits or use in industry of borax-chrome ores were not new. They were raised in the past many times in the leading ministries of ferrous and non-ferrous metallurgy, but remained unrealized. Now, with the help of the Economic Council those and other proposals met a quick and positive response.

The Section of Economic Investigations plays its role in the working out of measures for the expansion of the raw-material base for non-ferrous metallurgy and for the supply of fuel. The Economic Council accepted with interest the proposal about having a conference on the study of possibilities for wider uses of peat. We consider such a measure as very important. In the field of energetics the Middle Ural suffers from an acute deficiency of power-producing fuel. Considerable amounts of coal are delivered from far away places for that purpose, and at the same time, enormous deposits of peat, found in this part of the Ural territory, still remain unutilized. According to our calculations the output of peat could be increased ten fold. The wider use of peat as power-producing fuel could have a considerable effect on the national economy aside from the effects of its utilization for energy and chemicals.

In the past, the divisions between various departments made the proper solution of such a problem practically impossible. No ministry would undertake the task of developing the output of peat for the enterprises of other departments. Now, when there is only one master — the Economic Council — the output of peat on a large scale is quite feasible.

After the reorganization of the management of industry and the founding in the Ural of a number of economic councils, the scientific tasks of the Section of Economic Investigations of the Ural branch of the USSR Academy of Sciences did not experience serious changes. However, the organization and the direction of the scientific-research work became different. In the past we used to carry out scientific investigations for the Ural as a whole, without always being specific in regard to its various provinces. Now, in contrast, scientific work is carried on in accordance with the specific conditions of the various economic administrative regions, and only then are the conclusions generalized on the "all-Ural" scale. Thus, during the current year we started investigating the topic "The productive forces of Cheliabinsk province." This work is carried on in conjunction with the Institute of Mining and Geology and the Institute of Biology of our branch; different departments of the Cheliabinsk Economic Council also are cooperating. In particular, together with the department of metallurgical industry the problems of development of the production of the ferrous metals are studied and estimates of the necessary amounts of investment capital for the ferrous metallurgy industry are considered.

In conformity with the plan of scientific-research work of th section of economic investigations the problems of the development of intra-regional connections in the machine-building industry are also studied. The scientific workers of our sectio together with several representatives of the section of production and cooperation of the Cheliabinsk Economic Council, work out a method on the basis of which they accomplished an inquir into eleven casting shops of machine-building plants. The purpose was to find out certain points about specialization and cooperation. Similar work is being carried on with the represe atives of the Sverdlov Economic Council. The workers of our branch — Z. Drugalieva, N. Pershina, L. Zhukova, and D. Titov and the workers of the Department of Industry of the Sverdlov Economic Council accomplished an important job analyzing the status of cooperation in the machine-building industry.

The businesslike relation between the section of economic investigations of the Ural branch of the USSR Academy of Sciences and the economic councils of the economic and administrative regions of the Ural are now developing the form of their active participation in the working out of measures for the better use of local natural resources and the better organizatio of the relations of production in the industries of different regions. The economic councils in the first stage of their activity are anxious to study thoroughly the possibilities of developing industry in their regions. Our task is to help them as much as possible. But, it is already clear that our role will not be limited to that.

The highly developed industry of the Ural cannot realize its production relations in the limits of only one economic-administrative region. For instance, the development of ferrous metallurgy in the Middle and North Ural depends to a great extent upo raw-material and fuel resources located in other provinces. Th the metallurgical enterprises of the Cheliabinsk province have t use on a large scale the ores of Kazakhstan and the coking coals of Siberia. The ferrous metallurgy enterprises of the Sverdlov province in the next four to five years will have to use imported ores and coking coals of Pechora. Broad contacts in the field of raw materials exist also in the copper-smelting works of the Ur

It is very important to put right the problems of specializatio and cooperation in the machine-building industry of the Ural. In solving this problem too one cannot be limited by the confines o only one region. It is hardly expedient to produce ductile pig-ir for the needs of machine-building in all the six economic-admin trative regions of the Ural or, for instance, to build in every re a plant for manufacturing different metal articles for the needs machine-building enterprises. In the very near future the econo councils of the Ural economic-administrative regions will run i such problems. In solving them the appearance of selfish local tendencies is not excluded.

Therefore one of the most important tasks of the section of economic investigations of the Ural branch of the USSR Academ of Sciences is in rendering specific assistance to the economic councils by scientifically determining the correct, rational methods of development of intra-regional relations of productio On this basis it will be possible to utilize with maximum comple ness and economic effectiveness not only the Ural's natural resources, but also the capacity of the operating enterprises.

The Jubilee Scientific Sessions of the Institute of Economics, U. S. S. R. Academ of Sciences

At the end of September, 1957, a joint meeting of the scientifi councils was held in the Institute of Economics, devoted to the Great October Socialist Revolution.

Doctor of Economics N. A. Tsagolov presented a report "The Development of Soviet Economics over 40 Years." The reporte discussed the problems of Soviet economics during the differen stages of socialist construction, elucidating the basic trends of the studies carried on by Soviet economists. Relying on the fir nciples of Marxism-Leninism, and following the directives he Communist Party, Soviet economists have participated in development of Marxist economics.

octor of Economics G. D. Bakuliev presented a report on the elopment of the thermo-power base of the USSR national econ- y. He characterized its role in raising industrial production in solving the principal economic tasks. During the Sixth e-Year Plan, the thermo-power base is developing at a tempo stripping the growth of industrial production (especially electric rgy). The planned development of the power base of the USSR's ional economy during 40 years is one of the brilliant indices of the rmous advantages of the socialist order over the capitalist one.

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n November, 1957, in the Institute of Economics, a scientific sion was arranged, devoted to the 40th anniversary of Great ober. The representatives of the economic institutes and tions of the academies of sciences of the Union republics ticipated, as well as the economic investigation sections of branches of the USSR Academy of Sciences.

octor of Economics, I. A. Gladkov presented a report on eat October Revolution and the Socialist Collectivization of Means of Production." In this report, the economic and tical premises for the transition of the means of production socialist property in the USSR were characterized in detail. in had foreseen with genius that in other countries, which follow Russia in liberating themselves from the chains of erialism, the conditions for the transition to socialism and the radical transformation of society will be more favorable. ng a number of examples from the practice of the countries people's democracy, the reporter demonstrated how this sight of Lenin is justifying itself. The reporter elucidated results of the victory of socialism in the USSR.

octor of Economics A. I. Notkin presented a report on "The ic Laws and Peculiarities of the Socialist Industrialization of USSR." In this report, the principal, general traits of social- ndustrialization were analyzed as well as its special features ifferent countries. The problems of industrialization, connect- ith the advent of the world system of socialism and the international division of labor between socialist countries, were discussed. The reporter also dwelt on the total results of the development of industry in the USSR.

In the report of Doctor of Economics K. I. Klimenko, "40 Years of Soviet Machine-Building," it was shown how, as the result of successes in machine-building, the technical level of equipment in the decisive branches of the economy was raised. The reporter elucidated the principal trends in the development of the technology of machine-building, describing the intensification of the technological processes.

The participants of the session received copies of the report of Doctor of Economics M. A. Krayev, "The Basic Features of Agricultural Cooperation in the USSR." An article of Comrade Krayev, containing the basic theses of this report, was published in No. 11 of the journal "Problems of Economics."

Representatives of a number of scientific organizations participated in the discussions of the reports.

N. I. Nikiforov (Institute of Economics, Byelorussian Academy of Sciences) dwelt on the perspectives of the complex development of the economy of the BSSR in connection with the reconstruction of industrial management. He pointed out the successes in the development of Byelorussian industry and agriculture.

E. I. Brandt (Institute of Economics, Estonian Academy of Sciences) devoted his contribution to the successes of socialist construction in Estonia.

L. I. Rakhlis (Institute of Economics, Kazakh Academy of Sciences) cited the contents of the report prepared by a group of the associates of the Institute of Economics, Kazakh Academy of Sciences. In this report, the peculiarities of the transition to socialism and the originality of the industrialization process in Kazakhstan were shown.

A. S. Faradjev (Institute of Economics, Azerbaijan Academy of Sciences) gave information on certain characteristic aspects of agricultural collectivization and the successes in building collective farms in Azerbaijan.

A. K. Djagatspanian (Institute of Economics, Armenian Academy of Sciences) gave a detailed account of the growth of the national economy of Soviet Armenia.

ODASEVICH

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ll auxiliary enterprises which cannot be merged with others which it would not be expedient to preserve, they should be idated, and their land should be used, for instance, to organ- collective gardens for the surrounding population.

he realization of these measures would allow us to raise luctivity of labor in state agricultural enterprises and to a considerable contingent of workers now occupied in auxil- enterprises, for use in the national economy. A great economy would be achieved from a sharp decrease in the cost of agricultural production of this group of enterprises and liquidation of their losses, amounting to hundreds of millions of rubles yearly. Finally, the administrative-managerial apparatus of the auxiliary enterprises would be curtailed, and partly abolished. Realization of these measures would have a considerable economic effect without any expenditures by the state.

D IN STACKS